

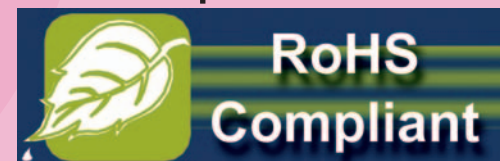


# 2009/10 PRODUCT CATALOGUE

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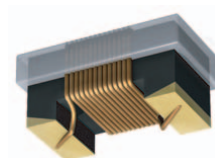
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**ISO 14001**  
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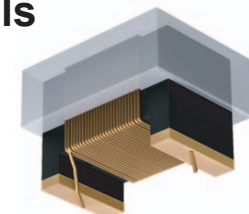


## New Products

### Transponder Coils



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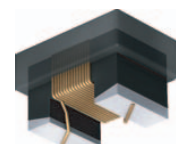
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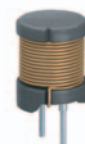
very  
robust  
design

### Chip Inductor



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### Plugable Inductor










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### Wide Band Choke



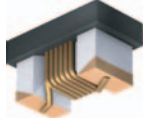
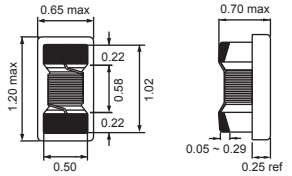
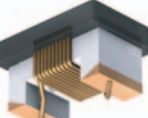
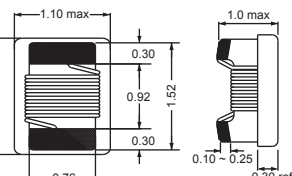
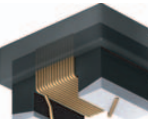
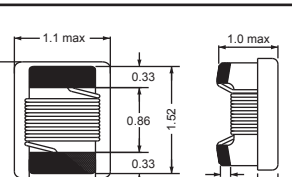
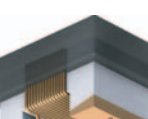
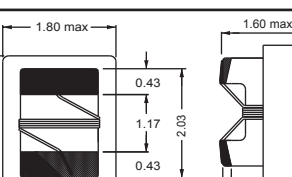
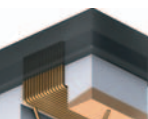
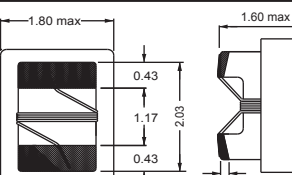
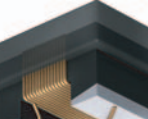
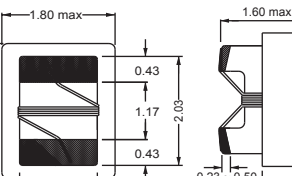
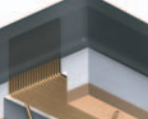
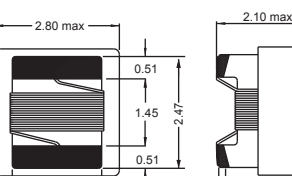
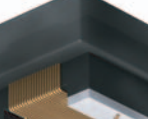
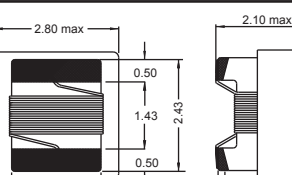
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Chip Inductors (wire wound - open)

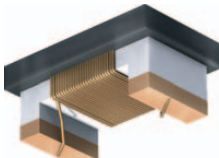
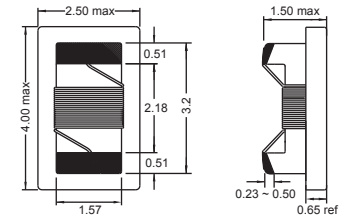
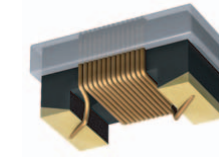
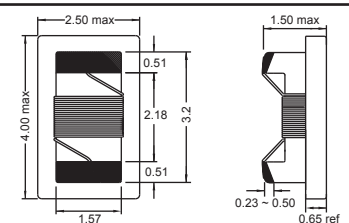
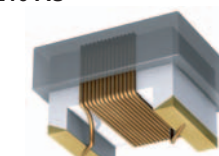
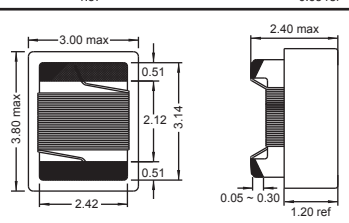
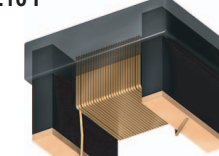
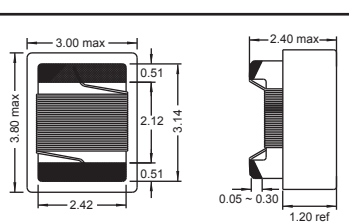
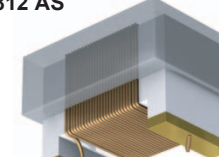
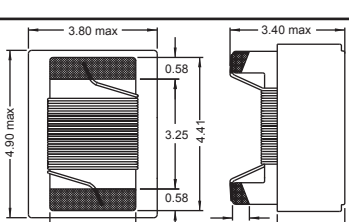
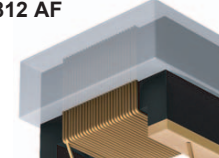
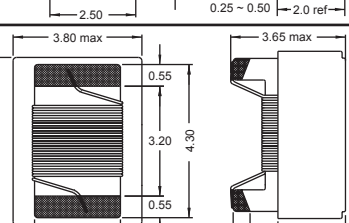


Type	Dimensions (mm)	Specifications	SPQ	Pg
 0402 AS		Inductance (L) : 0.9nH - 220nH SRF : 190MHz - 6000MHz DCR : 0.04Ω - 2.0Ω Rated DC Current : 50mA - 1360mA Material : Ceramic	Reel : 5,000 [-01] 2,000 [-08]  Engineer's Kit available : <b>EK-0402AS-X</b>	12
 0603 AS		Inductance (L) : 1.2nH - 1200nH SRF : 0.14GHz - >6.0GHz DCR : 0.03Ω - 4.2Ω Rated DC Current : 100mA - 850mA Material : Ceramic	Reel : 4,000 [-01] 2,000 [-08]  Engineer's Kit available : <b>EK-0603AS-X</b>	13
 0603 F		Inductance (L) : 47nH - 2200nH SRF : 140MHz - 1500MHz DCR : 0.075Ω - 2Ω Rated DC Current : 0.32mA - 1.4A Material : Ferrite	Reel : 4,000 [-01] 2,000 [-08]  Engineer's Kit available : <b>EK-0603F-X</b>	14
 0805 AS		Inductance (L) : 2.7nH - 10000nH SRF : 35MHz - 6000MHz DCR : 0.08Ω - 16Ω Rated DC Current : 60mA - 600mA Material : Ceramic	Reel : 2,500 [-01]  Engineer's Kit available : <b>EK-0805AS-X</b>	15
 0805 AQ		Inductance (L) : 2.5nH - 56nH SRF : 1400MHz - >6000MHz DCR : 0.02Ω - 0.12Ω Rated DC Current : 1000mA - 1600mA Material : Ceramic	Reel : 2,500 [-01]  Engineer's Kit available : <b>EK-0805AQ-X</b>	16
 0805 F		Inductance (L) : 0.68μH - 22μH SRF : 30MHz - 350MHz DCR : 0.50Ω - 6Ω Rated DC Current : 97mA - 450mA Material : Ferrite	Reel : 2,500 [-01]  Engineer's Kit available : <b>EK-0805F-X</b>	17
 1008 AS		Inductance (L) : 0.0047μH - 12μH SRF : 30MHz - 6000MHz DCR : 0.08Ω - 11.5Ω Rated DC Current : 110mA - 1000mA Material : Ceramic	Reel : 2,000 [-01]  Engineer's Kit available : <b>EK-1008AS-X</b>	18
 1008 F		Inductance (L) : 1.0μH - 47μH SRF : 20MHz - 210MHz DCR : 0.32Ω - 11Ω Rated DC Current : 150mA - 650mA Material : Ferrite	Reel : 2,000 [-01]  Engineer's Kit available : <b>EK-1008F-X</b>	19

Parts not actual size



Chip Inductors (wire wound - open)

Type	Dimensions (mm)	Specifications	SPQ	Pg
<b>1206 AS</b> 		Inductance (L) : 3.3nH - 4700nH SRF : 120MHz - 6000MHz DCR : 0.05Ω - 7.2Ω Rated DC Current : 120mA - 1000mA Material : Ceramic	Reel : 2,000 [-01]  Engineer's Kit available : <b>EK-1206AS-X</b>	20
<b>1206 F</b> 		Inductance (L) : 1.5μH - 100μH SRF : 23MHz - 240MHz DCR : 1.2Ω - 23.5Ω Rated DC Current : 80mA - 320mA Material : Ferrite	Reel : 2,000 [-01]  Engineer's Kit available : <b>EK-1206F-X</b>	21
<b>1210 AS</b> 		Inductance (L) : 10nH - 15000nH SRF : 20MHz - 4100MHz DCR : 0.08Ω - 7Ω Rated DC Current : 120mA - 1000mA Material : Ceramic	Reel : 800 [-01]  Engineer's Kit available : <b>EK-1210AS-X</b>	22
<b>1210 F</b> 		Inductance (L) : 0.1μH - 1000μH SRF : 1.6MHz - 375MHz DCR : 0.15Ω - 32Ω Rated DC Current : 55mA - 1131mA Material : Ferrite	Reel : 800 [-01]  Engineer's Kit available : <b>EK-1210F-X</b>	23
<b>1812 AS</b> 		Inductance (L) : 1.0μH - 82μH SRF : 15MHz - 277MHz DCR : 1.2Ω - 59Ω Rated DC Current : 55mA - 480mA Material : Ceramic	Reel : 600 [-01]  Engineer's Kit available : <b>EK-1812AS-X</b>	24
<b>1812 AF</b> 		Inductance (L) : 10μH - 2200μH SRF : 0.62MHz - 40MHz DCR : 1.8Ω - 84Ω Rated DC Current : 32mA - 310mA Material : Ceramic & Ferrite	Reel : 600 [-01]  Engineer's Kit available : <b>EK-1812AF-X</b>	25

Parts not actual size

Transponder Coils / Moulded Inductors



Type	Dimensions (mm)	Specifications	SPQ	Pg
 		Inductance (L) : 0.4mH - 2.38mH SRF : 950kHz - 2000kHz Material : Ferrite  <b>Low Profile Transponder Coil</b>	Reel : 2000 [-01]	27
 		Inductance (L) : 2.38mH - 7.36mH SRF : 470MHz - 650MHz Material : Ceramic & Ferrite  <b>High Q - Small Package Transponder Coil</b>	Reel : 600 [-01]	27
 		Inductance (L) : 0.40mH - 9.00mH SRF : 1200kHz - 6340kHz DCR : 11.5Ω - 150Ω Material : Plastic & Ferrite  <b>Very Robust Transponder Coil</b>	Reel : 3,000 [-04] 1,000 [-08]	28
		Inductance (L) : 0.37mH - 16.2mH SRF : 200kHz - 1200kHz DCR : 6.4Ω - 175Ω Material : Ceramic & Ferrite  <b>Transponder Coil</b>	Reel : 3,000 [-04] 1,000 [-08]	28
		Inductance (L) : 10μH - 33000μH SRF : 0.20MHz - 18MHz DCR : 0.17Ω - 150Ω Rated DC Current : 0.035A - 1.40A Material : Ferrite  <b>Similar to axial HBCC, page 40</b>	Reel : 750 [-04]	30
		Inductance (L) : 1μH - 10000μH SRF : 0.35MHz - 174MHz DCR : 0.16Ω - 115Ω Rated DC Current : 25mA - 1200mA Material : Ferrite  <b>Similar to axial SMCC, page 36</b>	Reel : 1700 [-04]	30

Parts not actual size



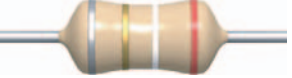
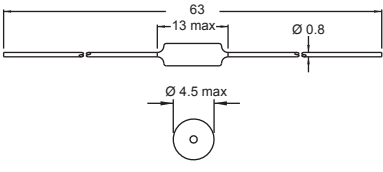

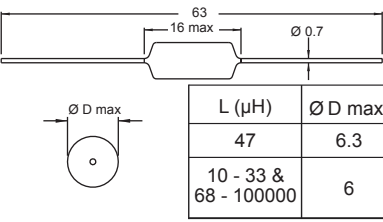
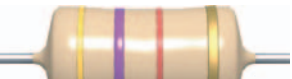
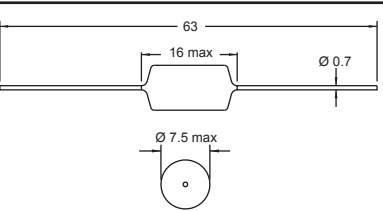

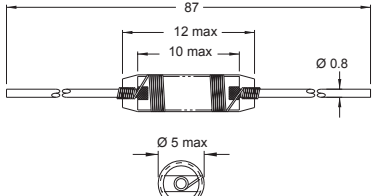

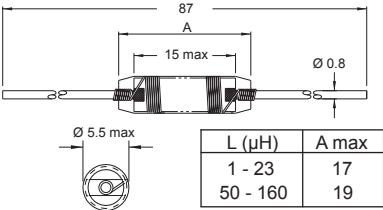

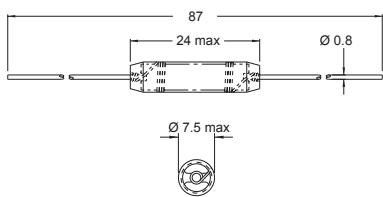

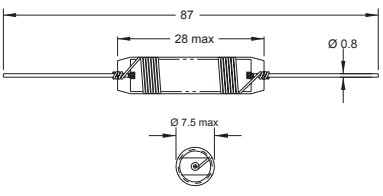

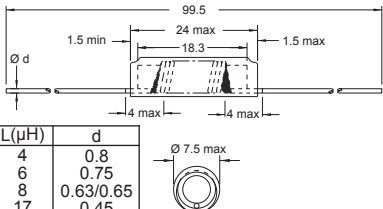


**Leaded Inductors (Fixed Choke Coils)**

Type	Dimensions (mm)	Specifications	SPQ	Pg												
MICC, MICC/N		Inductance (L) : 0.10 $\mu$ H - 1000 $\mu$ H SRF : 1.5MHz - 600MHz DCR : 0.11 $\Omega$ - 33 $\Omega$ Rated DC Current : 0.055A - 1.10A Material : Phenolic Ferrite	Loose/Box: 4000 [-00] Reel: 4000 [-01] Taped/Ammopack: 1500 [-02] Axial: 4000 [-00] Radial: 4000 [-50] Preform: 8000 [-20]	34												
MICCS, MICCS/N		Inductance (L) : 1 $\mu$ H - 330 $\mu$ H SRF : 5MHz - 180MHz DCR : 0.19 $\Omega$ - 28 $\Omega$ Rated DC Current : 105mA - 725mA Material : Ferrite	Loose/Box: 4000 [-00] Reel: 4000 [-01] Taped/Ammopack: 1500 [-02] Axial: 4000 [-00] Radial: 4000 [-50] Preform: 8000 [-20]	35												
SMCC, SMCC/N		Inductance (L) : 0.10 $\mu$ H - 10000 $\mu$ H SRF : 0.35MHz - 380MHz DCR : 0.08 $\Omega$ - 115 $\Omega$ Rated DC Current : 25mA - 1600mA Material : Phenolic Ferrite <b>Similar to moulded CCSS, page 30</b>	Loose/Box: 2000 [-00] Reel: 3500 [-01] Taped/Ammopack: 1200 [-02] Axial: 2000 [-00] Radial: 2000 [-50] Preform: 6000 [-20]	36												
MSMCC (shielded)		Inductance (L) : 1.0 $\mu$ H - 10000 $\mu$ H SRF : 0.2MHz - 140MHz DCR : 0.07 $\Omega$ - 90 $\Omega$ Rated DC Current : 0.04mA - 1900mA Material : Ferrite	Loose/Box: 1000 [-00] Reel: 3000 [-01] Taped/Ammopack: 1000 [-02] Axial: 1000 [-00] Preform: 1500 [-20]	37												
MECC		Inductance (L) : 1 $\mu$ H - 150 $\mu$ H SRF : 20MHz - 180MHz DCR : 0.13 $\Omega$ - 18 $\Omega$ Rated DC Current : 0.09A - 1.8A Material : Ferrite	Loose/Box: 2000 [-00] Reel: 3000 [-01] Taped/Ammopack: 1200 [-02] Axial: 2000 [-00] Preform: 1500 [-20]	38												
LACC		Inductance (L) : 1 $\mu$ H - 56 $\mu$ H SRF : 29MHz - 175MHz DCR : 0.09 $\Omega$ - 3.40 $\Omega$ Rated DC Current : 0.36A - 2A Material : Ferrite	Loose/Box: 2000 [-00] Reel: 3000 [-01] Taped/Ammopack: 1000 [-02] Axial: 2000 [-00] Preform: 1500 [-20]	38												
HACC		Inductance (L) : 1 $\mu$ H - 1000 $\mu$ H SRF : 2.8MHz - 195MHz DCR : 0.08 $\Omega$ - 10.5 $\Omega$ Rated DC Current : 0.78A - 2A Material : Ferrite	Loose/Box: 2000 [-00] Taped/Ammopack: 1200 [-02] Axial: 2000 [-00]	39												
HBCC	 <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>L (<math>\mu</math>H)</th> <th>A</th> <th>X</th> </tr> </thead> <tbody> <tr> <td>1 - 18</td> <td>14.5</td> <td>63</td> </tr> <tr> <td></td> <td></td> <td>72</td> </tr> <tr> <td>22 - 100000</td> <td>12.8</td> <td>66</td> </tr> </tbody> </table>	L ( $\mu$ H)	A	X	1 - 18	14.5	63			72	22 - 100000	12.8	66	Inductance (L) : 1 $\mu$ H - 100000 $\mu$ H SRF : 0.12MHz - 200MHz DCR : 0.08 $\Omega$ - 390 $\Omega$ Rated DC Current : 0.02A - 2.2A Material : Ferrite <b>Similar to molded CESH, pg 30</b>	Loose/Box: 1000 [-00] Reel: 1200 [-01] Taped/Ammopack: 600 [-02] Axial: 1000 [-00] Radial: 1000 [-31]	40
L ( $\mu$ H)	A	X														
1 - 18	14.5	63														
		72														
22 - 100000	12.8	66														


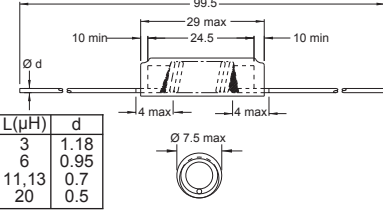

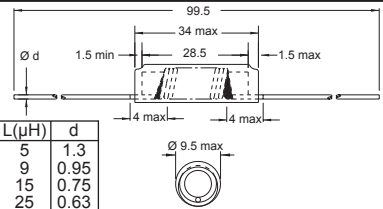

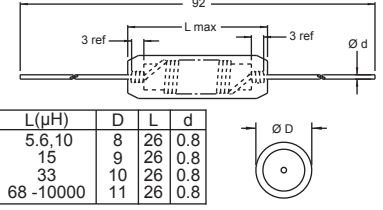

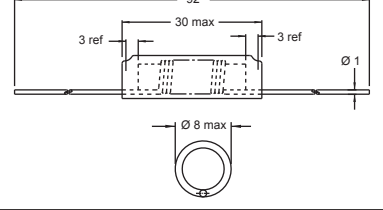

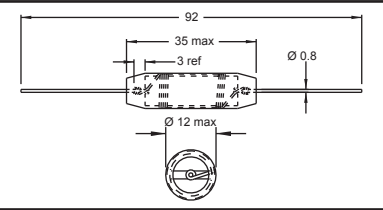

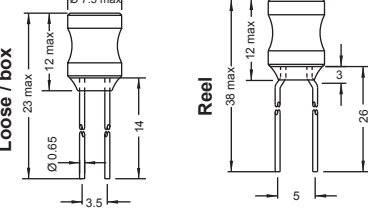

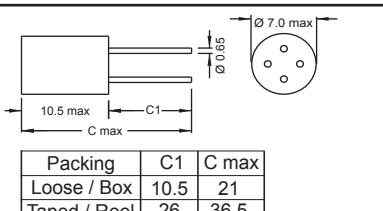

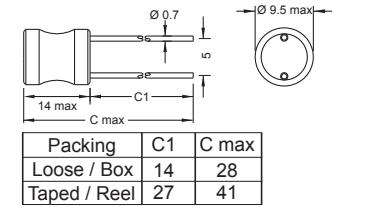


Leaded Inductors / Suppression Coils

Type	Dimensions (mm)	Specifications	SPQ	Pg
 <b>HCCC</b>		Inductance (L) : 0.7 $\mu$ H - 10 $\mu$ H DCR : 0.018 $\Omega$ - 0.32 $\Omega$ Rated DC Current : 1.30A - 7A Material : Ferrite	Loose/Box : 1000 [-00] Reel : 2500 [-01] Taped in Ammopack : 1000 [-02]	39
 <b>VHBCC</b>		Inductance (L) : 10 $\mu$ H - 100000 $\mu$ H SRF : 0.06MHz - 38MHz DCR : 0.09 $\Omega$ - 490 $\Omega$ Rated DC Current : 34mA - 2900mA Material : Ferrite	Loose/Box : 500 [-00] Reel : 1200 [-01]	41
 <b>XHBCC</b>		Inductance (L) : 100 $\mu$ H - 100000 $\mu$ H SRF : 0.06MHz - 2.50MHz DCR : 0.24 $\Omega$ - 245 $\Omega$ Rated DC Current : 50mA - 1620mA Material : Ferrite	Reel : 800 [-01] Taped in Ammopack : 300 [-02]	42
 <b>MISC</b>		Inductance (L) : 1 $\mu$ H - 100 $\mu$ H DCR : 18m $\Omega$ - 22800m $\Omega$ Rated DC Current : 0.15A - 4A Material : Iron Dust	Axial Reel : 1500 [-01]	44
 <b>SMSC</b>		Inductance (L) : 1 $\mu$ H - 160 $\mu$ H DCR : 14m $\Omega$ - 21600m $\Omega$ Rated DC Current : 0.15A - 6A Material : Iron Dust	Axial Reel : 1500 [-01]	44
 <b>MESC</b>		Inductance (L) : 3 $\mu$ H - 1500 $\mu$ H DCR : 22m $\Omega$ - 64800m $\Omega$ Rated DC Current : 0.08A - 6A Material : Iron Dust Ferrite	Axial Reel : 1000 [-01]	44
 <b>LASC</b>		Inductance (L) : 5 $\mu$ H - 470 $\mu$ H DCR : 28m $\Omega$ - 24000m $\Omega$ Rated DC Current : 0.15A - 6A Material : Iron Dust	Axial Reel : 1000 [-01]	45
 <b>SSSC</b>		Inductance (L) : 4 $\mu$ H - 17 $\mu$ H DCR : 14m $\Omega$ - 63m $\Omega$ Rated DC Current : 2A - 6A Material : Ferrite	Axial Loose / Box : 500 [-00]	45



Suppression Coils / Plugable Inductors (Pin Type Coils)


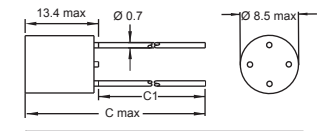

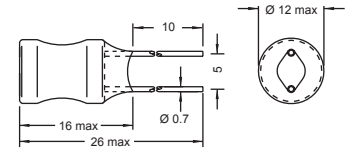

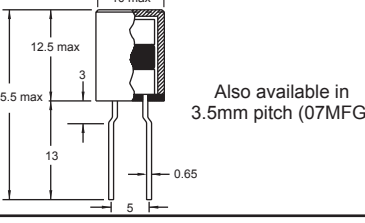

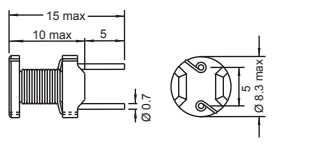
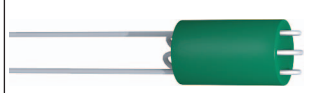
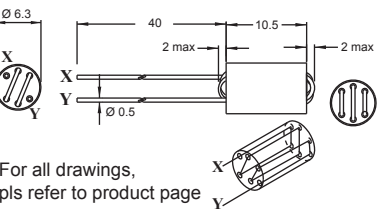
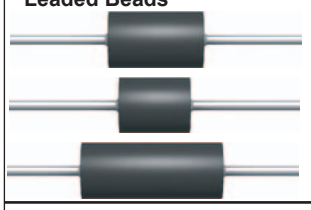
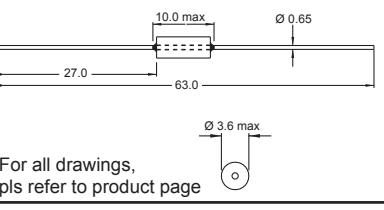

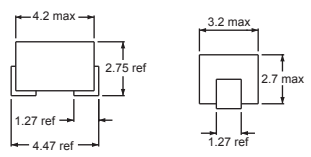
Type	Dimensions (mm)	Specifications	SPQ	Pg																				
 <p><b>MSSC</b></p>	 <table border="1"> <tr><th>L(μH)</th><th>d</th></tr> <tr><td>3</td><td>1.18</td></tr> <tr><td>6</td><td>0.95</td></tr> <tr><td>11,13</td><td>0.7</td></tr> <tr><td>20</td><td>0.5</td></tr> </table>	L(μH)	d	3	1.18	6	0.95	11,13	0.7	20	0.5	Inductance (L) : 3μH - 20μH DCR : 6mΩ - 54mΩ Rated DC Current : 3A - 9A Material : Ferrite	Axial Loose / Box : 350 [-00]	45										
L(μH)	d																							
3	1.18																							
6	0.95																							
11,13	0.7																							
20	0.5																							
 <p><b>LSSC</b></p>	 <table border="1"> <tr><th>L(μH)</th><th>d</th></tr> <tr><td>5</td><td>1.3</td></tr> <tr><td>9</td><td>0.95</td></tr> <tr><td>15</td><td>0.75</td></tr> <tr><td>25</td><td>0.63</td></tr> </table>	L(μH)	d	5	1.3	9	0.95	15	0.75	25	0.63	Inductance (L) : 5μH - 25μH DCR : 5mΩ - 46mΩ Rated DC Current : 3A - 10A Material : Ferrite	Axial Loose / Box : 200 [-00]	46										
L(μH)	d																							
5	1.3																							
9	0.95																							
15	0.75																							
25	0.63																							
 <p><b>77 A</b></p>	 <table border="1"> <tr><th>L(μH)</th><th>D</th><th>L</th><th>d</th></tr> <tr><td>5.6-10</td><td>8</td><td>26</td><td>0.8</td></tr> <tr><td>15</td><td>9</td><td>26</td><td>0.8</td></tr> <tr><td>33</td><td>10</td><td>26</td><td>0.8</td></tr> <tr><td>68-10000</td><td>11</td><td>26</td><td>0.8</td></tr> </table>	L(μH)	D	L	d	5.6-10	8	26	0.8	15	9	26	0.8	33	10	26	0.8	68-10000	11	26	0.8	Inductance (L) : 5.6μH - 10000μH DCR : 0.021Ω - 14.4Ω Rated DC Current : 0.3A - 12A Material : Ferrite	Loose / Box : 300 [-00] Reel : 500 [-01]	46
L(μH)	D	L	d																					
5.6-10	8	26	0.8																					
15	9	26	0.8																					
33	10	26	0.8																					
68-10000	11	26	0.8																					
 <p><b>77 A</b></p>		Inductance (L) : 3.9μH DCR : 0.011Ω Rated DC Current : 12A Material : Ferrite	Loose / Box : 300 [-00]	46																				
 <p><b>50 A</b></p>		Inductance (L) : 120μH - 8300μH DCR : 0.2Ω - 78Ω Rated DC Current : 0.1A - 2A Material : Ferrite	Axial Loose / Box : 150 [-00]	47																				
 <p><b>07 P (with tube)</b></p>		Inductance (L) : 100μH - 8200μH SRF : 0.65MHz - 5MHz DCR : 0.5Ω - 33Ω Rated DC Current: 50mA - 460mA Material : Ferrite	Radial Loose / Box : 500 [-50] Reel : 700 [-51]	49																				
 <p><b>07 P/F (with cap)</b></p>	 <table border="1"> <tr><th>Packing</th><th>C1</th><th>C max</th></tr> <tr><td>Loose / Box</td><td>10.5</td><td>21</td></tr> <tr><td>Taped / Reel</td><td>26</td><td>36.5</td></tr> </table>	Packing	C1	C max	Loose / Box	10.5	21	Taped / Reel	26	36.5	Inductance (L) : 680μH - 8200μH SRF : 0.65MHz - 2.3MHz DCR : 3.7Ω - 33Ω Rated DC Current: 50mA - 170mA Material : Ferrite	Radial Loose / Box : 500 [-50] Reel : 700 [-51]	50											
Packing	C1	C max																						
Loose / Box	10.5	21																						
Taped / Reel	26	36.5																						
 <p><b>09 P (with tube)</b></p>	 <table border="1"> <tr><th>Packing</th><th>C1</th><th>C max</th></tr> <tr><td>Loose / Box</td><td>14</td><td>28</td></tr> <tr><td>Taped / Reel</td><td>27</td><td>41</td></tr> </table>	Packing	C1	C max	Loose / Box	14	28	Taped / Reel	27	41	Inductance (L) : 1μH - 3300μH SRF : 0.26MHz - 80MHz DCR : 0.03Ω - 75Ω Rated DC Current : 50mA - 5000mA Material : Ferrite	Radial Loose / Box : 500 [-50] Reel : 500 [-51]	50											
Packing	C1	C max																						
Loose / Box	14	28																						
Taped / Reel	27	41																						

Parts not actual size



Plugable Inductors (Pin Type Coils) / Wide Band Chokes


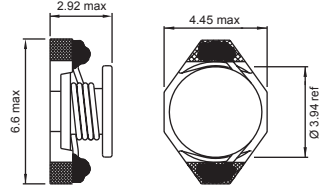

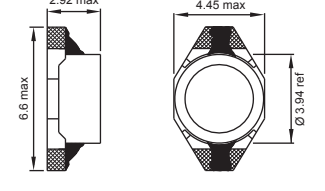

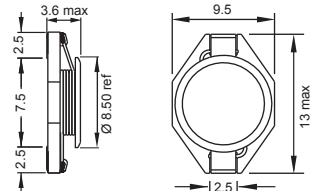

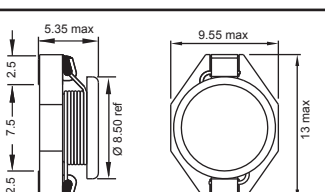

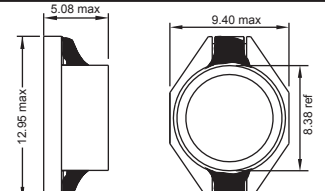

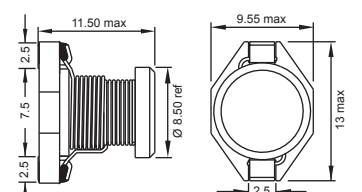

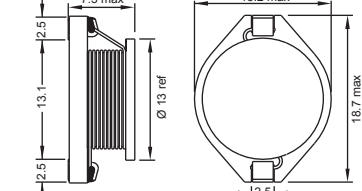

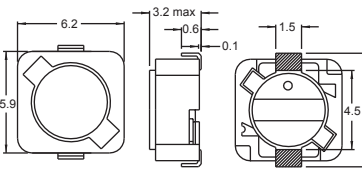


Type	Dimensions (mm)	Specifications	SPQ	Pg									
<b>09 P/F (with cap)</b> 	 <table border="1"> <tr> <td>Packing</td> <td>C</td> <td>C max</td> </tr> <tr> <td>Loose / Box</td> <td>10.5</td> <td>23.9</td> </tr> <tr> <td>Taped / Reel</td> <td>26</td> <td>39.4</td> </tr> </table>	Packing	C	C max	Loose / Box	10.5	23.9	Taped / Reel	26	39.4	Inductance (L) : 10 $\mu$ H - 33000 $\mu$ H SRF : 0.26MHz - 18MHz DCR : 0.03 $\Omega$ - 75 $\Omega$ Rated DC Current : 50mA - 2400mA Material : Ferrite	Radial Loose / Box : 500 [-50] Reel : 500 [-51]	51
Packing	C	C max											
Loose / Box	10.5	23.9											
Taped / Reel	26	39.4											
<b>11 P (with tube)</b> 		Inductance(L) : 0.01mH - 150mH SRF : 0.08MHz - 20MHz DCR : 0.035 $\Omega$ - 205 $\Omega$ Rated DC Current : 35mA - 3500mA Material : Ferrite	Radial Loose / Box : 250 [-50]	52									
<b>07 M (shielded)</b> 	 Also available in 3.5mm pitch (07MFG)	Inductance (L) : 1mH - 100mH DCR : 3.4 $\Omega$ - 120 $\Omega$ Rated DC Current : 7mA - 90mA Material : Ferrite	Radial Loose / Box : 250 [-50]	52									
<b>07 HCP</b> 		Inductance (L) : 1 $\mu$ H - 10000 $\mu$ H DCR : 0.06 $\Omega$ - 24 $\Omega$ Rated DC Current : 0.14A - 7.5A Material : Ferrite  <b>For High Currents</b>	Radial Loose / Box : 500 [-50]	53									
<b>06 H</b> 	 For all drawings, pls refer to product page	Impedance (Z) : 300 $\Omega$ - 800 $\Omega$ Current : 1A Material : Ferrite	Axial Loose / Box : 300 [-00] / [-50]	55									
<b>Leaded Beads</b> 	 For all drawings, pls refer to product page	Impedance (Z) for :- - Bead/4 : 90 $\Omega$ @100MHz - Bead/8 : 21 $\Omega$ @10MHz - Bead/10 : 60 $\Omega$ @10MHz Material : Ferrite	Reel : 3000 [-01] Taped / Ammpack : 1000 [-02]	56									
<b>SMD Beads</b> 		Impedance (Z) :- - 56 & 100 $\Omega$ Typ @ 100MHz - 63 & 112 $\Omega$ Typ @ 300MHz DCR : 0.01 $\Omega$ - 0.015 $\Omega$ Rated DC Current : 3A Material : Ferrite  <b>Flat Wire For High Currents</b>	Reel : 500 [-01] 3000 [-04]	57									

Parts not actual size



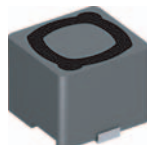
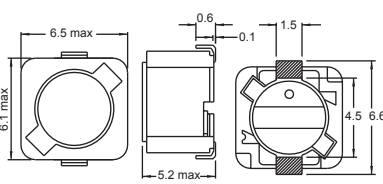
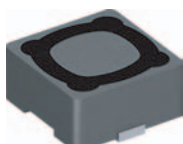
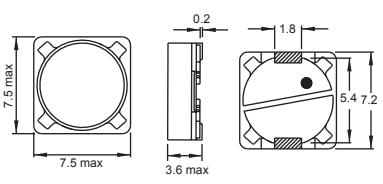
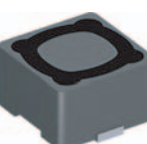
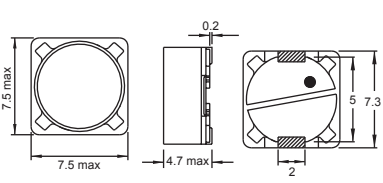
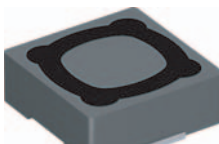
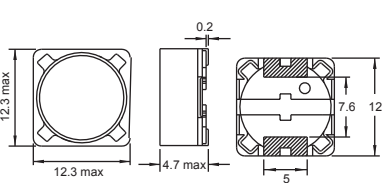
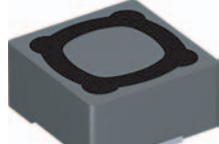
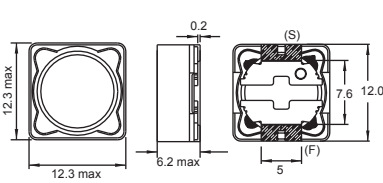
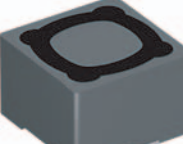
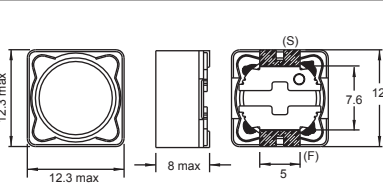
**SMD Power Inductors (also shielded)**

Type	Dimensions (mm)	Specifications	SPQ	Pg
 <p><b>PISG</b></p>		Inductance (L) : 1.0 $\mu$ H - 1000 $\mu$ H SRF : 2MHz - 130MHz DCR : 0.05 $\Omega$ - 13.8 $\Omega$ Rated DC Current : 0.07A - 2.9A Material : Ferrite	Reel : 750 [-01]  Engineer's Kit available : <b>EK-PISG</b>	59
 <p><b>SPISG (Shielded)</b></p>		Inductance (L) : 1.0 $\mu$ H - 10000 $\mu$ H SRF : 0.8MHz - 216MHz DCR : 0.04 $\Omega$ - 32.8 $\Omega$ Rated DC Current : 0.017A - 1.4A Material : Ferrite	Reel : 750 [-01]  Engineer's Kit available : <b>EK-SPISG</b>	59
 <p><b>PISL</b></p>		Inductance (L) : 10 $\mu$ H - 6800 $\mu$ H SRF : 1.5MHz - 37MHz DCR : 0.06 $\Omega$ - 30 $\Omega$ Rated DC Current : 0.045A - 2.2A Material : Ferrite	Reel : 1,500 [-04]  Engineer's Kit available : <b>EK-PISL</b>	60
 <p><b>PISM</b></p>		Inductance (L) : 1 $\mu$ H - 2200 $\mu$ H SRF : 1.4MHz - 115MHz DCR : 0.008 $\Omega$ - 7 $\Omega$ Rated DC Current : 0.22A - 6.9A Material : Ferrite	Reel : 1,000 [-04]  Engineer's Kit available : <b>EK-PISM</b>	60
 <p><b>SPISM (Shielded)</b></p>		Inductance (L) : 1 $\mu$ H - 1000 $\mu$ H SRF : 2MHz - 100MHz DCR : 0.021 $\Omega$ - 8.3 $\Omega$ Rated DC Current : 0.17A - 5A Material : Ferrite	Reel : 1000 [-04]  Engineer's Kit available : <b>EK-SPISM</b>	61
 <p><b>PISN</b></p>		Inductance (L) : 10 $\mu$ H - 1000 $\mu$ H SRF : 1.2MHz - 19MHz DCR : 0.024 $\Omega$ - 2 $\Omega$ Rated DC Current : 0.2A - 4.9A Material : Ferrite	Reel : 350 [-04]  Engineer's Kit available : <b>EK-PISN</b>	61
 <p><b>PISR</b></p>		Inductance (L) : 1 $\mu$ H - 1000 $\mu$ H SRF : 1.3MHz - 164MHz DCR : 0.009 $\Omega$ - 1.7 $\Omega$ Rated DC Current : 0.57A - 8.6A Material : Ferrite	Reel : 350 [-04]  Engineer's Kit available : <b>EK-PISR</b>	62
 <p><b>PIS 2408</b></p>		Inductance (L) : 2.9 $\mu$ H - 330 $\mu$ H DCR : 0.068 $\Omega$ - 4.94 $\Omega$ Rated DC Current : 0.19A - 1.94A Material : Ferrite	Reel : 1,200 [-04]	62

Parts not actual size

SMD Power Inductor (shielded)



Type	Dimensions (mm)	Specifications	SPQ	Pg
<b>PIS 2416</b> 		Inductance (L) : 10 $\mu$ H - 1000 $\mu$ H DCR : 0.12 $\Omega$ - 9.26 $\Omega$ Rated DC Current : 0.14A - 1.35A Material : Ferrite	Reel : 1,000 [-04]	63
<b>PIS 2812</b> 		Inductance (L) : 1 $\mu$ H - 1000 $\mu$ H DCR : 50m $\Omega$ - 9440m $\Omega$ Rated DC Current : 0.16A - 5A Material : Ferrite	Reel : 1,200 [-04]	63
<b>PIS 2816</b> 		Inductance (L) : 2.2 $\mu$ H - 1000 $\mu$ H DCR : 45m $\Omega$ - 6000m $\Omega$ Rated DC Current : 0.18A - 2.2A Material : Ferrite	Reel : 1,000 [-04]	64
<b>PIS 4716</b> 		Inductance (L) : 3.3 $\mu$ H - 330 $\mu$ H DCR : 15m $\Omega$ - 990m $\Omega$ Rated DC Current : 0.5A - 7A Material : Ferrite	Reel : 700 [-04]	64
<b>PIS 4720</b> 		Inductance (L) : 1.3 $\mu$ H - 1000 $\mu$ H DCR : 12m $\Omega$ - 1530m $\Omega$ Rated DC Current : 0.4A - 8A Material : Ferrite	Reel : 500 [-04]	65
<b>PIS 4728</b> 		Inductance (L) : 1.2 $\mu$ H - 1000 $\mu$ H DCR : 7m $\Omega$ - 1820m $\Omega$ Rated DC Current : 0.55A - 9.8A Material : Ferrite	Reel : 500 [-04]	66

Parts not actual size



## Chip Inductors (wire wound - open)

FASTRON wire wound chip inductors are designed particularly for RF applications that require optimal Q on high frequency circuits. Its gold flash pad metallization provides better solderability for a higher yield in your production. In addition, their encapsulation not only protects the winding but also allows surface mount assembly. It comes in compact sizes (from 0402 to 1812) available in reel packing. Inductance values between those listed in this catalog are mostly available on request. Ferrite core versions are also available for selected case sizes for applications which require higher inductances in a smaller case size.

**Applications** Used in LC resonant circuits such as oscillator and signal generators, IF impedance matching, circuit isolation, RF filters, PA chokes etc.  
 Mobile Telecommunication: GSM, CDMA, TCDMA, cordless phones, 2 way radio  
 Automotive Subsystems: TPMS, Keyless Entry, Anti-Theft, GPS  
 Wireless Communication: W-LAN, WIFI, WIMAX, RFID, Bluetooth

Technical Data	
L – Value (rated inductance)	> 1 MHz measured with HP 4286A RF LCR meter at frequency $f_L$ < 1 MHz measured with HP 4194A RF LCR meter at frequency $f_L$
Q – Factor (min)	> 1 MHz measured with HP 4287A RF LCR meter at frequency $f_Q$ < 1 MHz measured with HP 4194A RF LCR meter at frequency $f_Q$
SRF (min)	Measured with HP 8753 Network Analyzer
DCR (max)	Measured at 25°C
Operating Temperature	For ceramic core from -40°C to +125°C (includes component self-heating) For ferrite core from -40°C to +85°C (includes component self-heating)
Surface Finishing	Epoxy molded flat top for perfect pick and place assembly
Pad Metallization	Gold flash as top layer
Wire Termination	Spot welding
Recommended soldering method	Reflow
Solderability	Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
Resistance to Soldering Heat	Resistant to 260°C ± 5°C for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb)
Resistance to Solvent	Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45
Climatic Test	Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: +85°C for ferrite core and 125°C for ceramic core for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
Thermal Shock Test	Temperature cycle (ceramic) : -40°C to +125°C to -40°C Temperature cycle (ferrite) : -40°C to +85°C to -40°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G
Shear Test	Components withstand a pushing force of 10N for 10 ± 1 seconds Standard: IEC 60068-2-21, method Ue3
Mechanical Shock	Mil-Std 202 Method 213, Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

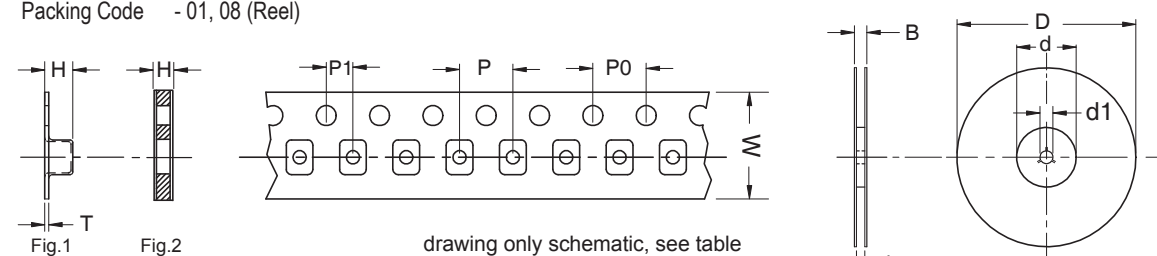
All dimensions in mm

Technical Data & Packing Spec

**Ordering Code** Example: **0402AS-1N0X-01**  
 (Case Size) (Core Type) (Inductance Value) (Tolerance) (Packing Code)

- Case Sizes - 0402, 0603, 0805, 1008, 1206, 1210, 1812
- Core Type - AS (Ceramic), F (Ferrite), AF (Ceramic & Ferrite)
- Tolerances - F (1%), G (2%), A (3%), J (5%), K (10%), M (20%)
- **Bold is the standard tolerance**
- Packing Code - 01, 08 (Reel)

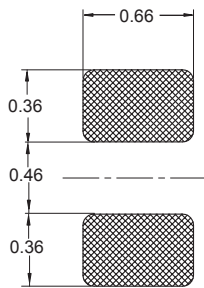
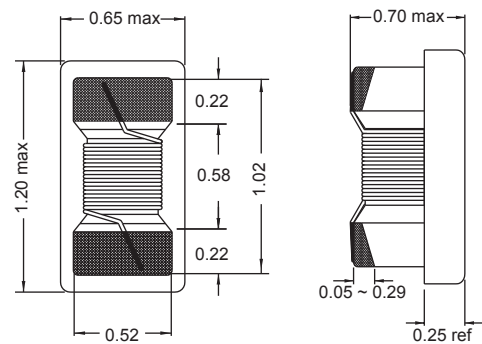
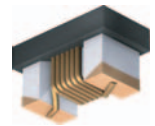
### Packing Specification



Type	D	d	d1	B	b	W	P	P0	P1	H	T	Fig
0402	180	60	13	12.7	8.4	8	2	4	2	0.8	-	2
0603	180	60	13	12.7	8.4	8	4	4	2	2.5	0.25	1
0805	180	60	13	12.7	8.4	8	4	4	2	1.86	0.25	1
1008	180	60	13	12.7	8.4	8	4	4	2	2.5	0.229	1
1206	180	60	13	12.7	8.4	8	4	4	2	2.5	0.2	1
1210	180	60	13	18.7	12.4	12	8	4	2	2.5	0.4	1
1812	180	60	13	18.4	15.4	12	8	4	2	4.28	0.28	1

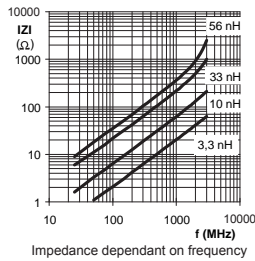
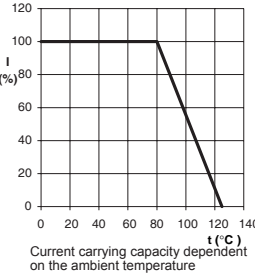
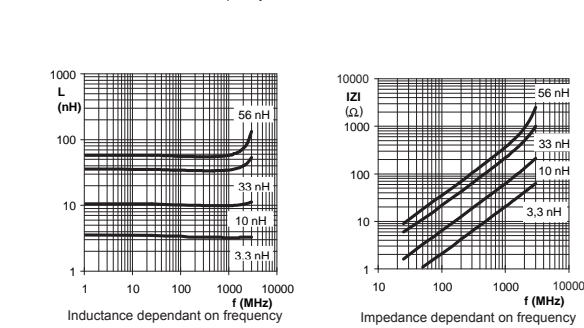
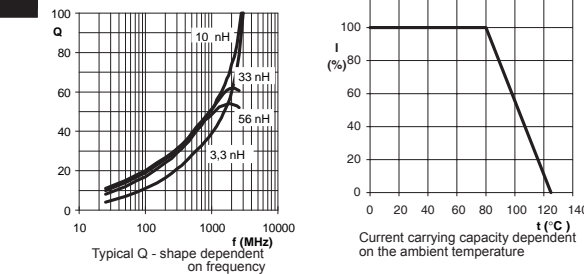
# 0402 AS

Engineer's Kit : EK-0402AS-X



recommended layout for solder pads

All dimensions in mm  
Chip Inductors (wire wound - open)



Part No	Inductance L (nH)	f <sub>l</sub> (MHz)	ToI ± (%)	Q min	f <sub>a</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current max (mA)
0402AS-0N9X-01	0.9	250	5,10	11	250	6000	0.04	1360
0402AS-1N0X-01	1.0	250	5,10	11	250	6000	0.07	700
0402AS-1N2X-01	1.2	250	5,10	11	250	6000	0.11	700
0402AS-1N8X-01	1.8	250	5,10	16	250	6000	0.07	1040
0402AS-1N9X-01	1.9	250	5,10	16	250	6000	0.07	1040
0402AS-2N0X-01	2.0	250	5,10	16	250	6000	0.07	1040
0402AS-2N2X-01	2.2	250	5,10	14	250	6000	0.11	640
0402AS-2N4X-01	2.4	250	5,10	16	250	6000	0.12	640
0402AS-2N5X-01	2.5	250	5,10	16	250	6000	0.12	640
0402AS-2N7X-01	2.7	250	5,10	16	250	6000	0.12	640
0402AS-2N9X-01	2.9	250	5,10	16	250	6000	0.10	700
0402AS-3N3X-01	3.3	250	5,10	20	250	6000	0.10	700
0402AS-3N6X-01	3.6	250	5,10	19	250	6000	0.10	700
0402AS-3N9X-01	3.9	250	5,10	19	250	4800	0.10	700
0402AS-4N3X-01	4.3	250	5,10	18	250	6000	0.091	700
0402AS-4N7X-01	4.7	250	5,10	15	250	4775	0.130	640
0402AS-5N1X-01	5.1	250	5,10	23	250	4800	0.083	800
0402AS-5N6X-01	5.6	250	5,10	22	250	4800	0.110	760
0402AS-6N2X-01	6.2	250	5,10	20	250	4800	0.110	760
0402AS-6N8X-01	6.8	250	5,10	21	250	4800	0.100	680
0402AS-7N5X-01	7.5	250	5,10	24	250	4800	0.100	680
0402AS-8N2X-01	8.2	250	5,10	24	250	4400	0.100	680
0402AS-8N7X-01	8.7	250	5,10	22	250	4160	0.160	681
0402AS-9N0X-01	9.0	250	5,10	22	250	4160	0.160	681
0402AS-9N1X-01	9.1	250	5,10	22	250	4000	0.200	480
0402AS-9N5X-01	9.5	250	5,10	22	250	4000	0.200	480
0402AS-010X-01	10	250	5,10	21	250	3900	0.200	480
0402AS-011X-01	11	250	5,10	24	250	3680	0.170	640
0402AS-012X-01	12	250	5,10	24	250	3600	0.170	640
0402AS-013X-01	13	250	5,10	24	250	3600	0.170	640
0402AS-015X-01	15	250	5,10	24	250	3280	0.170	560
0402AS-016X-01	16	250	5,10	24	250	3100	0.220	560
0402AS-018X-01	18	250	5,10	25	250	3100	0.23	420
0402AS-019X-01	19	250	5,10	24	250	3040	0.24	480
0402AS-020X-01	20	250	5,10	25	250	3000	0.25	420
0402AS-022X-01	22	250	5,10	25	250	2800	0.30	400
0402AS-023X-01	23	250	5,10	22	250	2720	0.30	400
0402AS-024X-01	24	250	5,10	22	250	2480	0.30	400
0402AS-027X-01	27	250	5,10	24	250	2480	0.30	400
0402AS-030X-01	30	250	5,10	24	250	2350	0.30	400
0402AS-033X-01	33	250	5,10	24	250	2350	0.30	320
0402AS-036X-01	36	250	5,10	24	250	2320	0.44	320
0402AS-039X-01	39	250	5,10	25	250	2100	0.55	200
0402AS-040X-01	40	250	5,10	25	250	2100	0.83	150
0402AS-043X-01	43	250	5,10	25	250	2100	0.75	150
0402AS-047X-01	47	250	5,10	25	250	2100	0.83	150
0402AS-051X-01	51	250	5,10	25	250	1760	0.97	100
0402AS-056X-01	56	250	5,10	25	250	1760	0.97	100
0402AS-068X-01	68	250	5,10	25	250	1620	0.97	100
0402AS-072X-01	72	100	5,10	15	100	1070	1.20	80
0402AS-082X-01	82	100	5,10	18	100	1070	1.20	80
0402AS-R10X-01	100	100	5,10	15	100	1070	1.20	80
0402AS-R12X-01	120	100	5,10	12	100	580	1.30	75
0402AS-R13X-01	130	100	5,10	10	100	450	1.30	70
0402AS-R15X-01	150	100	5,10	13	100	400	1.30	60
0402AS-R18X-01	180	50	5,10	10	50	380	1.50	65
0402AS-R20X-01	200	50	5,10	10	50	400	1.50	50
0402AS-R22X-01	220	50	5,10	10	50	190	2.00	50

Material : Ceramic

SPQ : Reel 5000 [-01]  
2000 [-08]

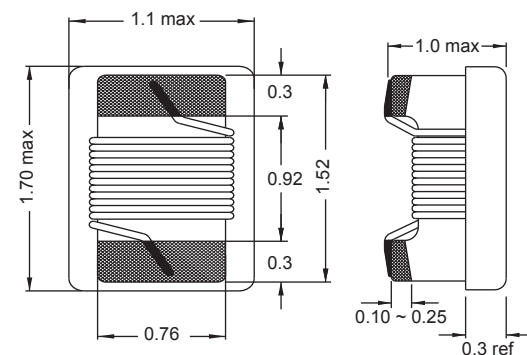
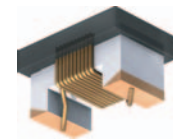
Remarks : - For not listed inductance values please check availability with us.  
- 2% available on request.



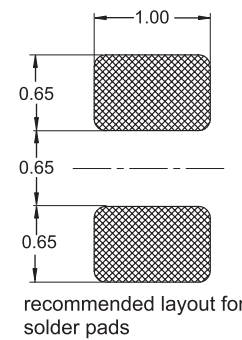


# 0603 AS

Engineer's Kit : EK-0603AS-X



All dimensions in mm



recommended layout for solder pads

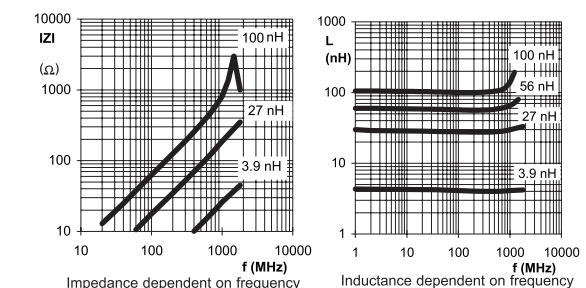
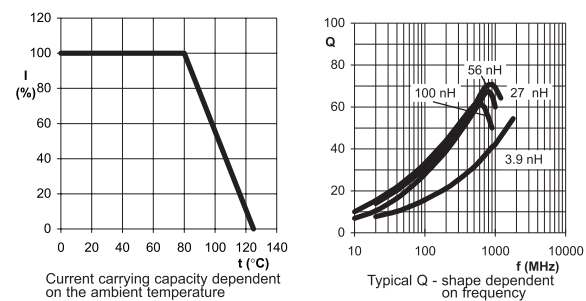
Chip Inductors (wire wound - open)

Part No	Inductance L (nH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (GHz)	DCR max (Ω)	Rated DC Current (mA)
0603AS-1N2X-01	1.2	250	20	30	250	>6	0.03	850
0603AS-1N3X-01	1.3	250	10	30	250	>6	0.03	850
0603AS-1N5X-01	1.5	250	5,10	20	250	>6	0.03	850
0603AS-1N6X-01	1.6	250	5,10	20	250	>6	0.03	850
0603AS-1N8X-01	1.8	250	5,10	16	250	>6	0.045	700
0603AS-2N0X-01	2	250	5,10	10	250	5.9	0.17	170
0603AS-2N2X-01	2.2	250	5,10	10	250	5.9	0.17	170
0603AS-3N3X-01	3.3	250	5,10	22	250	6	0.1	700
0603AS-3N6X-01	3.6	250	5,10	20	250	>6	0.08	700
0603AS-3N9X-01	3.9	250	5,10	22	250	>6	0.08	700
0603AS-4N3X-01	4.3	250	5,10	25	250	>6	0.07	700
0603AS-4N7X-01	4.7	250	5,10	25	250	>6	0.07	700
0603AS-5N1X-01	5.1	250	5,10	20	250	>6	0.1	700
0603AS-5N6X-01	5.6	250	5,10	27	250	6	0.12	700
0603AS-6N2X-01	6.2	250	5,10	25	250	5.8	0.11	700
0603AS-6N8X-01	6.8	250	5,10	27	250	5.8	0.11	700
0603AS-7N5X-01	7.5	250	5,10	30	250	5.4	0.12	700
0603AS-7N6X-01	7.6	250	5,10	30	250	5.4	0.12	700
0603AS-8N0X-01	8	250	5,10	30	250	5.4	0.12	700
0603AS-8N2X-01	8.2	250	5,10	30	250	5.4	0.12	700
0603AS-8N7X-01	8.7	250	5,10	28	250	4.6	0.109	700
0603AS-8N9X-01	8.9	250	5,10	25	250	4.6	0.19	700
0603AS-9N5X-01	9.5	250	5,10	25	250	5	0.19	700
0603AS-010X-01	10	250	2,5,10	31	250	4.8	0.13	700
0603AS-011X-01	11	250	2,5,10	35	250	4	0.13	700
0603AS-012X-01	12	250	2,5,10	35	250	4	0.13	700
0603AS-015X-01	15	250	2,5,10	35	250	4	0.17	700
0603AS-016X-01	16	250	2,5,10	35	250	3.2	0.17	700
0603AS-018X-01	18	250	2,5,10	35	250	3.1	0.17	700
0603AS-022X-01	22	250	2,5,10	38	250	3	0.19	700
0603AS-024X-01	24	250	2,5,10	38	250	2.8	0.22	600
0603AS-027X-01	27	250	2,5,10	40	250	2.8	0.22	600
0603AS-030X-01	30	250	2,5,10	40	250	2.3	0.22	600
0603AS-033X-01	33	250	2,5,10	40	250	2.3	0.22	600
0603AS-036X-01	36	250	2,5,10	40	250	2.2	0.25	600
0603AS-039X-01	39	250	2,5,10	40	250	2.2	0.25	600
0603AS-043X-01	43	250	2,5,10	40	250	2	0.28	600
0603AS-047X-01	47	200	2,5,10	38	200	2	0.28	600
0603AS-051X-01	51	200	2,5,10	38	200	1.9	0.28	600
0603AS-056X-01	56	200	2,5,10	38	200	1.9	0.31	400
0603AS-068X-01	68	200	2,5,10	37	200	1.7	0.34	400
0603AS-072X-01	72	150	2,5,10	34	150	1.7	0.49	400
0603AS-082X-01	82	150	2,5,10	34	150	1.7	0.54	400
0603AS-090X-01	90	150	2,5,10	34	150	1.7	0.54	400
0603AS-R10X-01	100	150	2,5,10	34	150	1.4	0.58	400
0603AS-R11X-01	110	150	2,5,10	34	150	1.35	0.61	300
0603AS-R12X-01	120	150	2,5,10	34	150	1.3	0.65	300
0603AS-R13X-01	130	150	2,5,10	32	150	1.2	0.9	200
0603AS-R15X-01	150	150	2,5,10	32	150	1.2	0.9	200
0603AS-R18X-01	180	100	2,5,10	32	100	1.1	1.2	200
0603AS-R20X-01	200	100	2,5,10	30	100	1.1	1.55	200
0603AS-R22X-01	220	100	2,5,10	30	100	1	1.6	150
0603AS-R27X-01	270	100	2,5,10	30	100	0.95	2.3	150
0603AS-R30X-01	300	100	2,5,10	30	100	0.9	2.4	150
0603AS-R33X-01	330	100	2,5,10	30	100	0.6	2.5	150
0603AS-R39X-01	390	100	5,10	25	100	0.45	2.9	150
0603AS-R47X-01	470	25	5,10	16	25	0.23	2.8	150
0603AS-R56X-01	560	25	5,10	16	25	0.15	2.9	150
0603AS-R68X-01	680	25	5,10	16	25	0.14	3	140
0603AS-R75X-01	750	25	5,10	16	25	0.32	3.5	130
0603AS-R82X-01	820	25	5,10	16	25	0.29	3.7	120
0603AS-R91X-01	910	25	5,10	16	25	0.14	3.8	120
0603AS-1R0X-01	1000	25	5,10	16	25	0.25	4	110
0603AS-1R2X-01	1200	25	5,10	16	25	0.14	4.2	100

Material : Ceramic

SPQ : Reel 4000 [-01]  
2000 [-08]

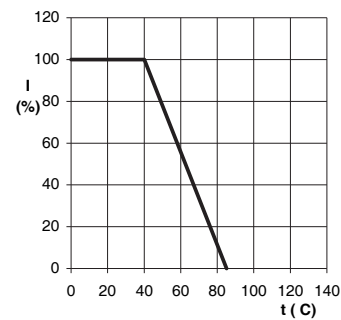
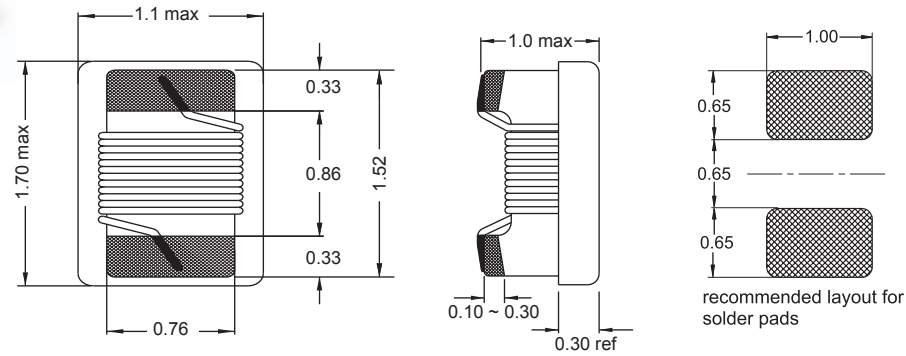
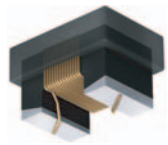
Remark: For not listed inductance values please check availability with us.



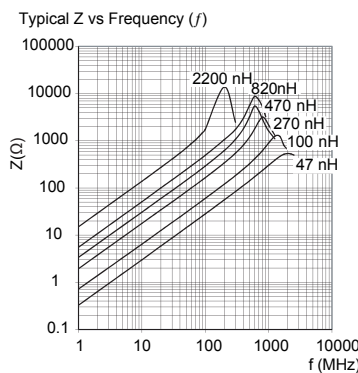
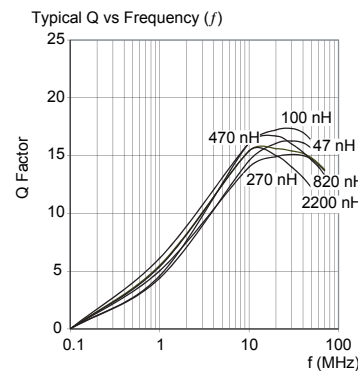
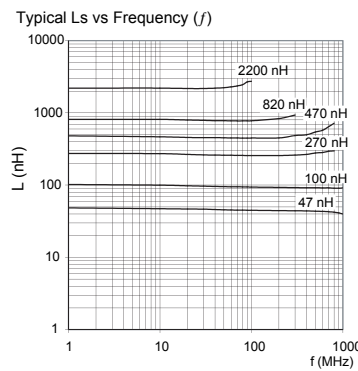
**0603F**

Engineer's Kit : EK-0603F-X

**New**



Current carrying capacity dependent on the ambient temperature



Part No	Inductance L (nH)	$f_L$ (MHz)	Tol $\pm$ (%)	Q min	$f_Q$ (MHz)	SRF min (MHz)	DCR max ( $\Omega$ )	Rated DC Current (A)
0603F-047X-01	47	7.9	5,10	12	7.9	1500	0.075	1.4
0603F-072X-01	72	7.9	5,10	12	7.9	1400	0.12	1.4
0603F-R10X-01	100	7.9	5,10	12	7.9	1150	0.13	1.4
0603F-R12X-01	120	7.9	5,10	12	7.9	1100	0.15	1.4
0603F-R15X-01	150	7.9	5,10	12	7.9	1050	0.15	1.3
0603F-R18X-01	180	7.9	5,10	12	7.9	950	0.15	1.3
0603F-R22X-01	220	7.9	5,10	12	7.9	800	0.16	0.95
0603F-R24X-01	240	7.9	5,10	12	7.9	800	0.16	0.95
0603F-R27X-01	270	7.9	5,10	12	7.9	775	0.3	0.71
0603F-R33X-01	330	7.9	5,10	12	7.9	725	0.46	0.56
0603F-R39X-01	390	7.9	5,10	12	7.9	620	0.51	0.5
0603F-R47X-01	470	7.9	5,10	12	7.9	540	0.62	0.42
0603F-R56X-01	560	7.9	5,10	12	7.9	525	0.44	0.55
0603F-R68X-01	680	7.9	5,10	12	7.9	260	0.52	0.47
0603F-R78X-01	780	7.9	5,10	12	7.9	460	0.69	0.39
0603F-R82X-01	820	7.9	5,10	12	7.9	410	0.83	0.4
0603F-1R0X-01	1000	7.9	5,10	12	7.9	280	1.1	0.4
0603F-1R5X-01	1500	7.9	5,10	12	7.9	230	1.7	0.35
0603F-2R2X-01	2200	7.9	5,10	12	7.9	140	2	0.32

Material : Ferrite

SPQ : Reel 4000 [-01]  
2000 [-08]

Remarks: - For not listed inductance values please check availability with us.  
- 2% available on request.

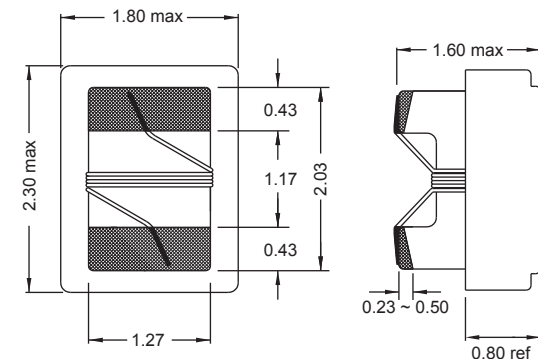
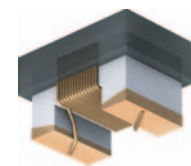
All dimensions in mm

Chip Inductors (wire wound - open)

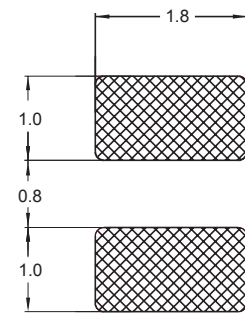


# 0805 AS

Engineer's Kit : EK-0805AS-X

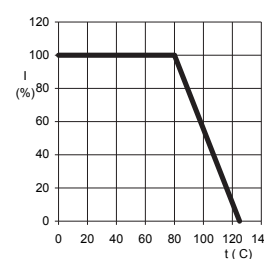


All dimensions in mm

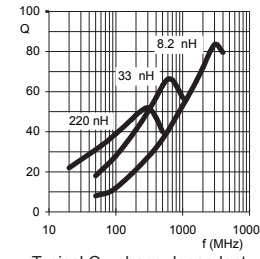


recommended layout for solder pads

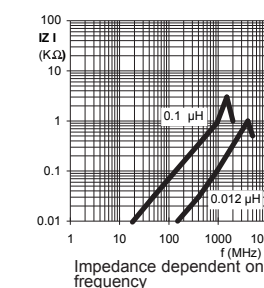
Chip Inductors (wire wound - open)



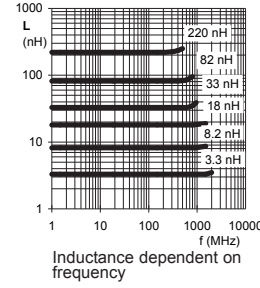
Current carrying capacity dependent on the ambient temperature



Typical Q - shape dependent on frequency



Impedance dependent on frequency



Inductance dependent on frequency

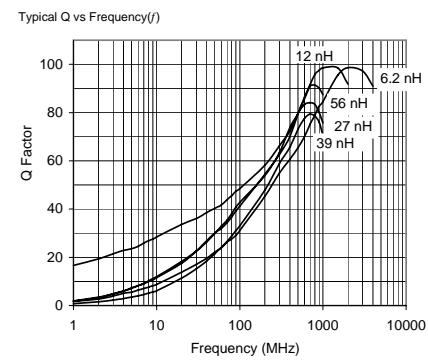
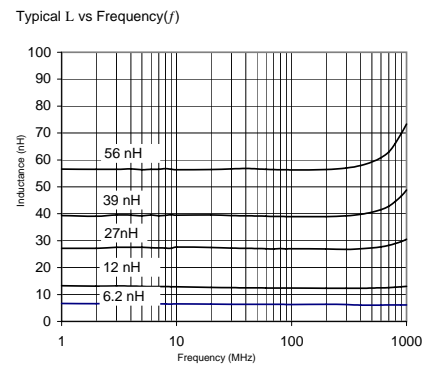
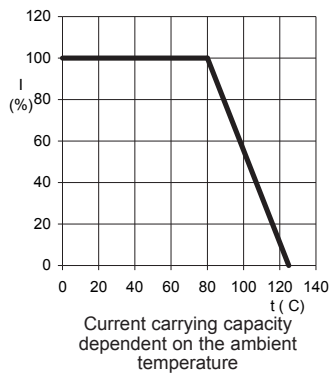
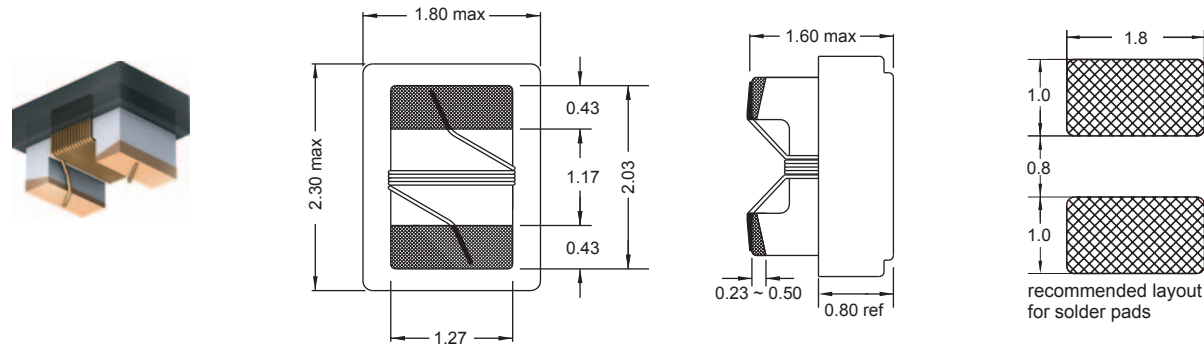
Part No	Inductance L (nH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>0</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
0805AS-2N7X-01	2.7	250	5,10	80	1500	6000	0.08	600
0805AS-3N3X-01	3.3	250	5,10	50	1500	6000	0.08	600
0805AS-3N9X-01	3.9	250	5,10	25	1000	6000	0.2	600
0805AS-5N6X-01	5.6	250	5,10	53	1000	5500	0.11	600
0805AS-5N8X-01	5.8	250	5,10	50	1000	5500	0.11	600
0805AS-6N8X-01	6.8	250	5,10	50	1000	5500	0.11	600
0805AS-8N0X-01	8	250	5,10	51	1000	4700	0.12	600
0805AS-8N2X-01	8.2	250	5,10	50	1000	4700	0.12	600
0805AS-010X-01	10	250	2,5,10	43	1000	4300	0.13	600
0805AS-011X-01	11	250	5,10	65	1000	4000	0.13	600
0805AS-012X-01	12	250	2,5,10	50	500	4000	0.15	600
0805AS-015X-01	15	250	2,5,10	50	500	3400	0.17	600
0805AS-018X-01	18	250	2,5,10	53	500	3300	0.2	600
0805AS-022X-01	22	250	2,5,10	57	500	2600	0.22	500
0805AS-027X-01	27	250	2,5,10	55	500	2500	0.25	500
0805AS-033X-01	33	250	2,5,10	60	500	2050	0.27	500
0805AS-036X-01	36	250	5,10	60	500	2050	0.27	600
0805AS-039X-01	39	250	2,5,10	60	500	2000	0.29	500
0805AS-047X-01	47	200	2,5,10	65	500	1650	0.31	500
0805AS-056X-01	56	200	2,5,10	64	500	1550	0.34	500
0805AS-068X-01	68	200	2,5,10	65	500	1450	0.38	400
0805AS-075X-01	75	200	2,5,10	55	500	1300	0.42	400
0805AS-082X-01	82	150	2,5,10	67	500	1300	0.42	400
0805AS-R10X-01	100	150	2,5,10	65	500	1200	0.46	400
0805AS-R12X-01	120	150	2,5,10	52	250	1100	0.51	400
0805AS-R13X-01	130	100	2,5,10	53	250	920	0.56	400
0805AS-R15X-01	150	100	2,5,10	60	250	920	0.56	400
0805AS-R18X-01	180	100	2,5,10	50	250	870	0.64	400
0805AS-R20X-01	200	100	2,5,10	54	250	850	0.7	400
0805AS-R22X-01	220	100	2,5,10	59	250	850	0.7	400
0805AS-R24X-01	240	100	2,5,10	52	250	850	0.8	400
0805AS-R25X-01	250	100	2,5,10	52	250	850	0.8	400
0805AS-R27X-01	270	100	2,5,10	40	100	820	1.5	280
0805AS-R29X-01	290	100	2,5,10	40	100	795	1.8	260
0805AS-R30X-01	300	100	2,5,10	40	100	795	1.8	260
0805AS-R31X-01	310	100	2,5,10	40	100	795	1.8	260
0805AS-R32X-01	320	100	2,5,10	40	100	790	1.8	260
0805AS-R33X-01	330	100	2,5,10	40	100	790	1.8	260
0805AS-R34X-01	340	100	2,5,10	40	100	790	1.8	260
0805AS-R35X-01	350	100	2,5,10	40	100	750	2	200
0805AS-R39X-01	390	100	2,5,10	42	100	750	2	200
0805AS-R45X-01	450	100	2,5,10	40	100	720	2.5	200
0805AS-R47X-01	470	100	2,5,10	40	100	720	2.5	170
0805AS-R51X-01	510	100	2,5,10	40	100	650	3.5	170
0805AS-R56X-01	560	100	2,5,10	40	100	650	3.5	170
0805AS-R68X-01	680	50	2,5,10	37	75	600	4	170
0805AS-R75X-01	750	25	5,10	23	50	215	2.35	180
0805AS-R80X-01	800	25	5,10	23	50	215	2.35	180
0805AS-R82X-01	820	25	5,10	23	50	215	2.35	180
0805AS-R91X-01	910	25	5,10	23	50	215	2.35	180
0805AS-1R0X-01	1000	25	5,10	23	50	215	2.35	180
0805AS-1R2X-01	1200	7.9	5,10	15	7.9	80	2.8	200
0850AS-1R5X-01	1500	7.9	5,10	15	50	80	3	200
0805AS-1R8X-01	1800	7.9	5,10	15	50	80	3	210
0805AS-2R0X-01	2000	7.9	5,10	15	7.9	80	3.5	170
0805AS-2R2X-01	2200	7.9	5,10	15	7.9	60	3.8	150
0503AS-2R4X-01	2400	7.9	5,10	15	7.9	150	3.8	120
0805AS-2R7X-01	2700	7.9	5,10	15	7.9	100	5	120
0805AS-3R0X-01	3000	7.9	5,10	15	7.9	150	4.8	120
0805AS-3R3X-01	3300	7.9	5,10	15	7.9	99	5.1	120
0805AS-3R6X-01	3600	7.9	5,10	15	7.9	150	5	100
0805AS-3R9X-01	3900	7.9	5,10	15	7.9	90	7.1	100
0805AS-4R3X-01	4300	7.9	5,10	15	7.9	150	7.2	100
0805AS-4R7X-01	4700	7.9	5,10	15	7.9	50	8	100
0805AS-5R6X-01	5600	7.9	5,10	15	7.9	50	9.5	90
0805AS-100X-01	10000	7.9	5,10	15	7.9	35	16	60

Material : Ceramic  
SPQ : Reel 2500 [-01]

Remark: For not listed inductance values please check availability with us.

# 0805AQ (high Q)

Engineer's Kit : EK-0805AQ-X



Part No	Inductance L (nH)	f <sub>L</sub> (MHz)	ToI ± (%)	Q min	f <sub>a</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
0805AQ-2N5X-01	2.5	250	5,10	80	1500	>6000	0.02	1600
0805AQ-2N7X-01	2.7	250	5,10	67	1500	>6000	0.02	1600
0805AQ-5N6X-01	5.6	250	5,10	98	1500	>6000	0.035	1600
0805AQ-6N2X-01	6.2	250	5,10	88	1000	4750	0.035	1600
0805AQ-8N7X-01	8.7	250	10	50	1000	5300	0.045	1600
0805AQ-011X-01	11	250	5,10	83	1000	3000	0.06	1600
0805AQ-012X-01	12	250	5,10	80	1000	3000	0.045	1600
0805AQ-016X-01	16	250	5,10	78	500	2950	0.06	1500
0805AQ-018X-01	18	250	2,5,10	76	500	2550	0.06	1400
0805AQ-020X-01	20	250	2,5,10	74	500	2050	0.055	1400
0805AQ-022X-01	22	250	2,5,10	60	500	2050	0.07	1400
0805AQ-027X-01	27	250	2,5,10	75	500	2000	0.07	1300
0805AQ-030X-01	30	250	2,5,10	69	500	1950	0.095	1200
0805AQ-039X-01	39	250	2,5,10	74	500	1600	0.11	1100
0805AQ-047X-01	47	200	2,5,10	85	500	1400	0.095	1200
0805AQ-048X-01	48	200	2,5,10	71	500	1400	0.095	1200
0805AQ-051X-01	51	200	2,5,10	65	500	1400	0.12	1000
0805AQ-056X-01	56	200	2,5,10	75	500	1400	0.12	1000

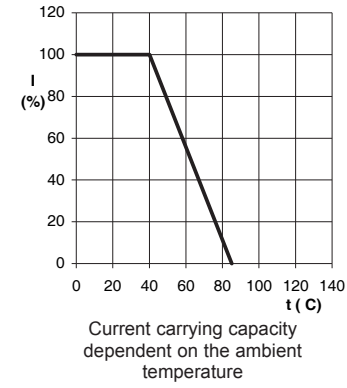
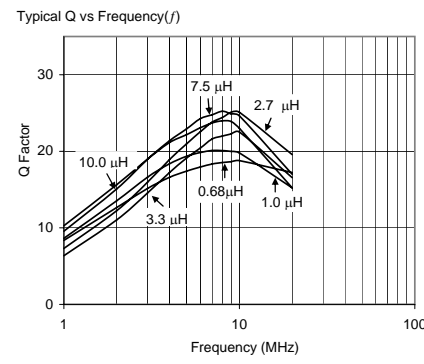
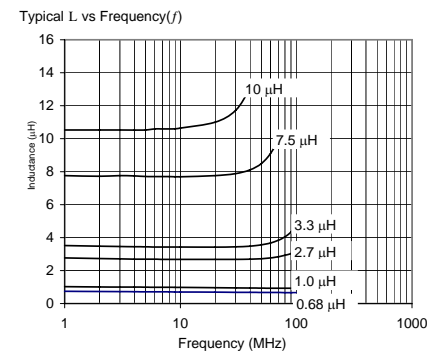
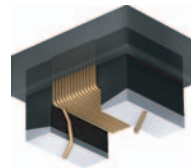
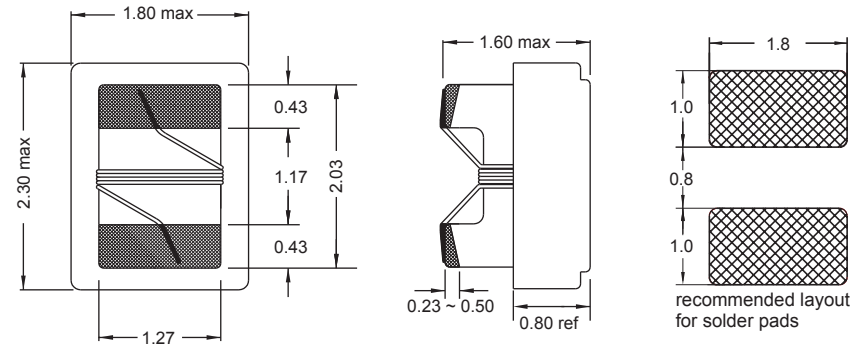
Material : Ceramic  
SPQ : Reel 2500 [-01]

Remark: For not listed inductance values please check availability with us.



# 0805 F

Engineer's Kit : EK-0805F-X



All dimensions in mm  
Chip Inductors (wire wound - open)

Part No	Inductance L (µH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
0805F-R68X-01	0.68	25.2	5,10	18	7.9	350	0.5	450
0805F-R82X-01	0.82	25.2	5,10	18	7.9	350	0.55	400
0805F-1R0X-01	1	7.9	5,10	20	7.9	350	0.5	250
0805F-1R2X-01	1.2	7.9	5,10	20	7.9	300	0.65	220
0805F-1R5X-01	1.5	7.9	5,10	20	7.9	250	0.75	200
0805F-1R8X-01	1.8	7.9	5,10	20	7.9	200	0.85	190
0805F-2R2X-01	2.2	7.9	5,10	20	7.9	200	1.7	130
0805F-2R7X-01	2.7	7.9	5,10	20	7.9	200	2	120
0805F-3R3X-01	3.3	7.9	5,10	20	7.9	200	3.3	100
0805F-3R9X-01	3.9	7.9	5,10	20	7.9	150	3.6	95
0805F-4R7X-01	4.7	7.9	5,10	20	7.9	150	3.8	90
0805F-5R6X-01	5.6	7.9	5,10	20	7.9	80	2.8	175
0805F-6R2X-01	6.2	7.9	5,10	20	7.9	70	3	165
0805F-6R8X-01	6.8	7.9	5,10	20	7.9	65	3.1	160
0805F-7R5X-01	7.5	7.9	5,10	20	7.9	60	3.4	160
0805F-8R2X-01	8.2	7.9	5,10	20	7.9	55	3.7	160
0805F-9R1X-01	9.1	7.9	5,10	20	7.9	50	3.7	150
0805F-100X-01	10	7.9	5,10	20	7.9	45	3.8	150
0805F-120X-01	12	7.9	5,10	18	7.9	25	4.2	150
0805F-150X-01	15	7.9	5,10	18	7.9	25	5	150
0805F-220X-01	22	7.9	5,10	15	7.9	30	6	97

Material : Ferrite

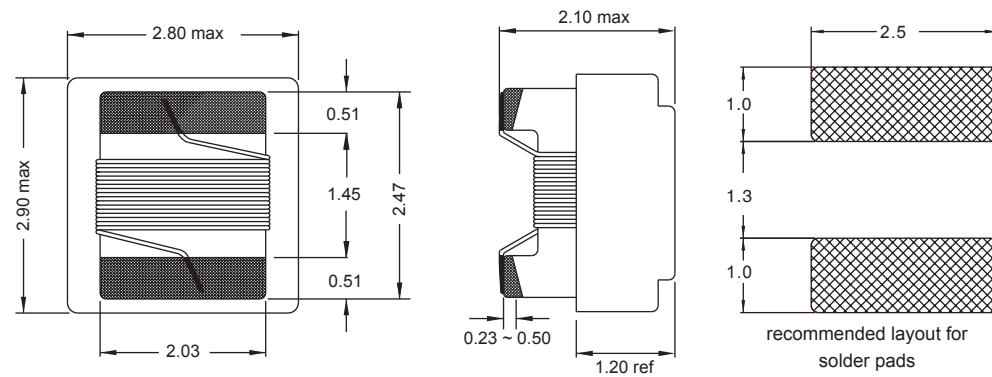
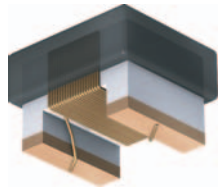
SPQ : Reel 2500 [-01]

Remarks: - For not listed inductance values please check availability with us.  
- 2% available on request.

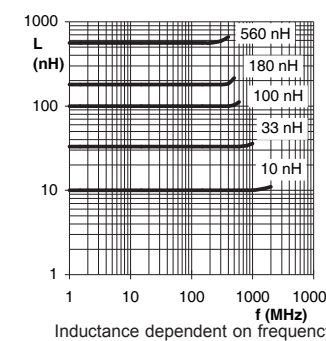
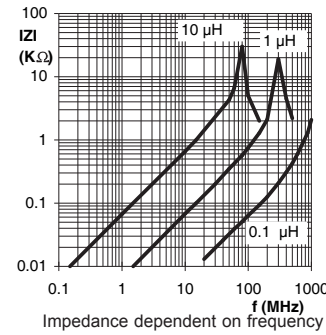
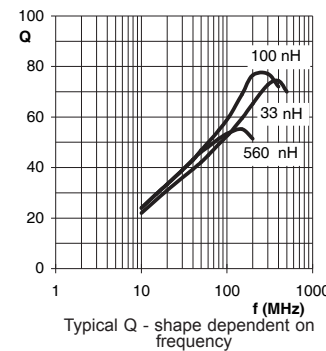
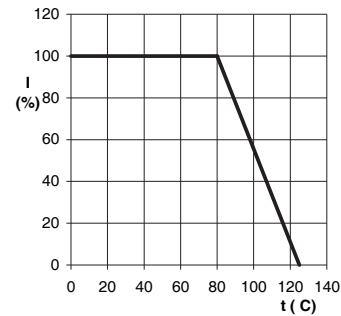


# 1008 AS

Engineer's Kit : EK-1008AS-X



All dimensions in mm  
Chip Inductors (wire wound - open)



Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>α</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
1008AS-4N7X-01	0.0047	50	5,10	17	500	6000	0.15	600
1008AS-8N2X-01	0.0082	50	5,10	70	1000	5000	0.08	600
1008AS-010X-01	0.01	50	5,10	50	500	4100	0.08	1000
1008AS-012X-01	0.012	50	5,10	53	500	3300	0.09	1000
1008AS-015X-01	0.015	50	2,5,10	70	500	2500	0.1	1000
1008AS-018X-01	0.018	50	2,5,10	50	350	2500	0.11	1000
1008AS-022X-01	0.022	50	2,5,10	55	350	2400	0.12	1000
1008AS-027X-01	0.027	50	2,5,10	58	350	1600	0.13	1000
1008AS-030X-01	0.03	50	2,5,10	65	350	1600	0.14	1000
1008AS-033X-01	0.033	50	2,5,10	65	350	1600	0.14	1000
1008AS-039X-01	0.039	50	2,5,10	60	350	1500	0.15	1000
1008AS-047X-01	0.047	50	2,5,10	65	350	1500	0.16	1000
1008AS-056X-01	0.056	50	2,5,10	65	350	1300	0.18	1000
1008AS-068X-01	0.068	50	2,5,10	67	350	1300	0.2	1000
1008AS-082X-01	0.082	50	2,5,10	63	350	1000	0.22	650
1008AS-090X-01	0.09	50	2,5,10	60	350	1000	0.56	650
1008AS-R10X-01	0.1	25	2,5,10	63	350	1000	0.56	650
1008AS-R12X-01	0.12	25	2,5,10	60	350	950	0.63	650
1008AS-R15X-01	0.15	25	2,5,10	50	100	850	0.7	620
1008AS-R18X-01	0.18	25	2,5,10	45	100	750	0.77	620
1008AS-R22X-01	0.22	25	2,5,10	46	100	700	0.84	620
1008AS-R24X-01	0.24	25	2,5,10	46	100	600	0.84	600
1008AS-R27X-01	0.27	25	2,5,10	48	100	600	0.91	500
1008AS-R30X-01	0.3	25	2,5,10	45	100	600	0.91	500
1008AS-R33X-01	0.33	25	2,5,10	51	100	570	1.05	470
1008AS-R39X-01	0.39	25	2,5,10	47	100	500	1.12	470
1008AS-R47X-01	0.47	25	2,5,10	54	100	450	1.19	470
1008AS-R51X-01	0.51	25	2,5,10	51	100	415	1.33	400
1008AS-R56X-01	0.56	25	2,5,10	56	100	415	1.33	400
1008AS-R62X-01	0.62	25	2,5,10	49	100	375	1.4	400
1008AS-R68X-01	0.68	25	2,5,10	46	100	375	1.47	400
1008AS-R75X-01	0.75	25	2,5,10	46	100	360	1.54	400
1008AS-R82X-01	0.82	25	2,5,10	52	100	350	1.61	400
1008AS-R91X-01	0.91	25	5,10	37	50	320	1.68	380
1008AS-1R0X-01	1	25	5,10	36	50	290	1.75	370
1008AS-1R1X-01	1.1	25	5,10	35	50	250	1.85	350
1008AS-1R2X-01	1.2	7.9	5,10	35	50	250	2	310
1008AS-1R4X-01	1.4	7.9	5,10	33	50	200	2.3	330
1008AS-1R5X-01	1.5	7.9	5,10	35	50	200	2.3	330
1008AS-1R8X-01	1.8	7.9	5,10	34	50	160	2.6	300
1008AS-2R2X-01	2.2	7.9	5,10	28	50	160	2.8	280
1008AS-2R7X-01	2.7	7.9	5,10	23	25	140	4.8	110
1008AS-3R3X-01	3.3	7.9	5,10	22	25	110	5.1	110
1008AS-3R9X-01	3.9	7.9	5,10	27	25	100	5.4	110
1008AS-4R7X-01	4.7	7.9	5,10	20	25	65	6	110
1008AS-5R0X-01	5	7.9	5,10	20	25	60	6.6	110
1008AS-5R6X-01	5.6	7.9	5,10	22	7.9	55	6.5	110
1008AS-6R8X-01	6.8	7.9	5,10	22	7.9	48	7.5	110
1008AS-8R2X-01	8.2	7.9	5,10	24	7.9	44	8.4	110
1008AS-100X-01	10	7.9	5,10	20	7.9	40	8.4	110
1008AS-120X-01	12	7.9	5,10	20	7.9	30	11.5	136

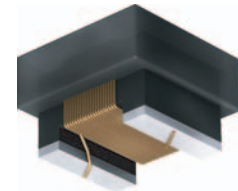
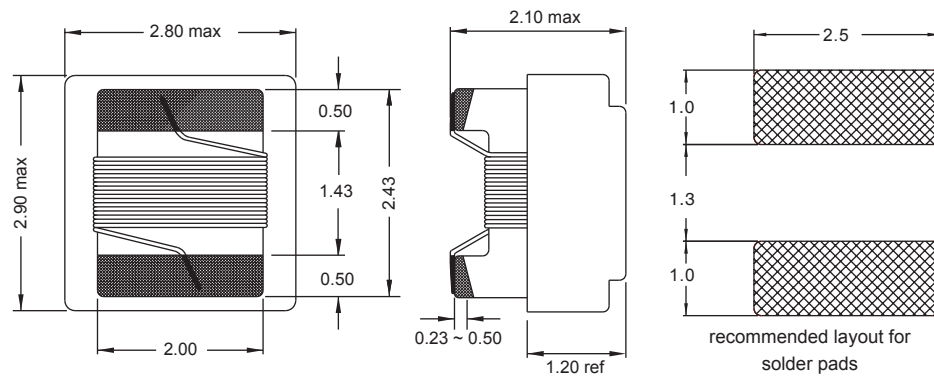
Material : Ceramic  
SPQ : Reel 2000 [-01]

Remark: For not listed inductance values please check availability with us.



# 1008 F

Engineer's Kit : EK-1008F-X

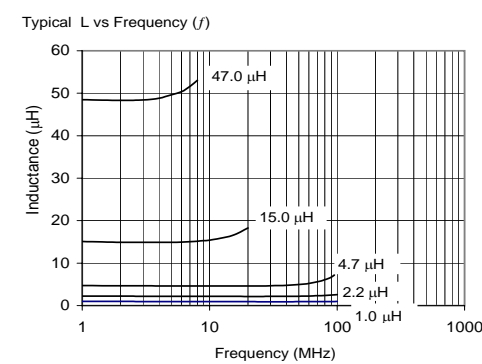
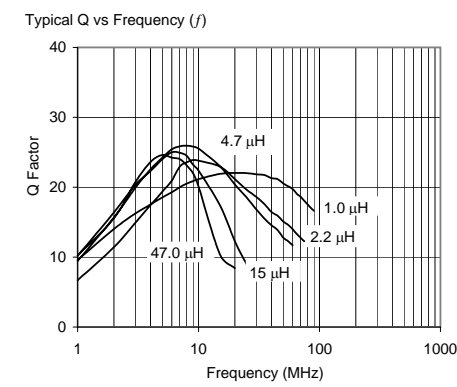
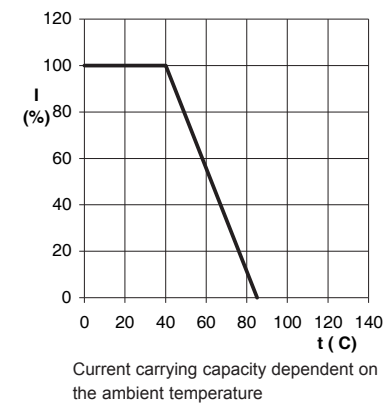


Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>0</sub> max (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
1008F-1R0X-01	1	7.9	5.10	15	7.9	190	0.32	500
1008F-1R2X-01	1.2	7.9	5.10	25	7.9	210	0.68	650
1008F-1R5X-01	1.5	7.9	5.10	25	7.9	190	0.76	630
1008F-1R8X-01	1.8	7.9	5.10	25	7.9	170	0.84	600
1008F-2R2X-01	2.2	7.9	5.10	25	7.9	150	1.1	520
1008F-2R7X-01	2.7	7.9	5.10	25	7.9	135	1.28	490
1008F-3R3X-01	3.3	7.9	5.10	25	7.9	120	1.46	450
1008F-3R9X-01	3.9	7.9	5.10	25	7.9	105	1.56	420
1008F-4R7X-01	4.7	7.9	5.10	25	7.9	90	1.68	400
1008F-5R6X-01	5.6	7.9	5.10	25	7.9	80	1.82	380
1008F-6R8X-01	6.8	7.9	5.10	25	7.9	70	2	360
1008F-8R2X-01	8.2	7.9	5.10	25	7.9	65	2.65	330
1008F-100X-01	10	7.9	5.10	25	7.9	60	2.95	300
1008F-120X-01	12	2.5	5.10	24	7.9	40	4.8	280
1008F-150X-01	15	2.5	5.10	23	7.9	35	5	260
1008F-180X-01	18	2.5	5.10	23	7.9	35	5.8	220
1008F-220X-01	22	2.5	5.10	22	7.9	30	6.8	200
1008F-240X-01	24	2.5	5.10	22	7.9	30	6.8	200
1008F-270X-01	27	2.5	5.10	23	7.9	30	7.7	190
1008F-330X-01	33	2.5	5.10	22	7.9	27	8.9	180
1008F-390X-01	39	2.5	5.10	20	7.9	20	9.2	190
1008F-470X-01	47	2.5	5.10	21	7.9	20	11	150

Material : Ferrite

SPQ : Reel 2000 [-01]

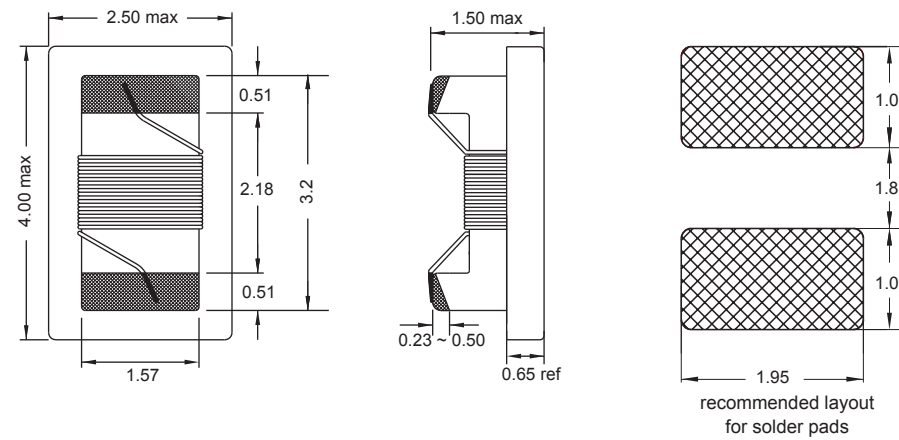
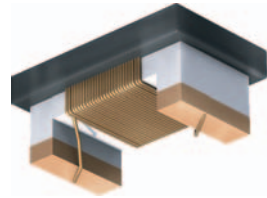
Remarks: - For not listed inductance values please check availability with us.  
 - 2% available on request.



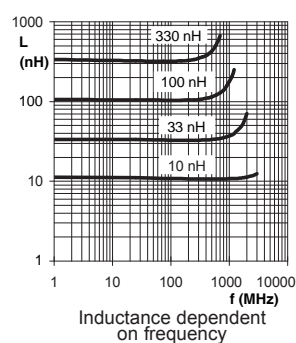
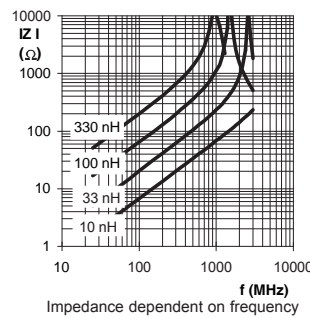
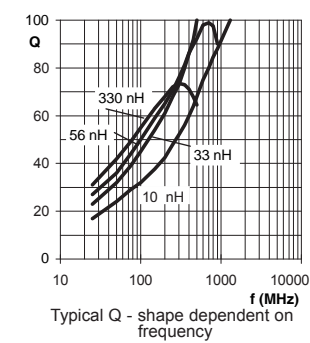
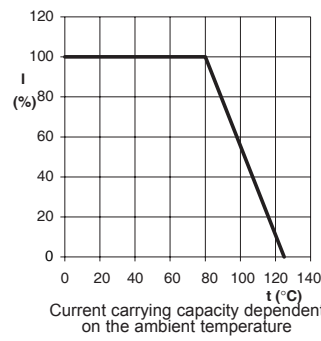
Chip Inductors (wire wound - open)

# 1206 AS

Engineer's Kit : EK-1206AS-X



All dimensions in mm



Part No	Inductance L (nH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>a</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current max (mA)
1206AS-3N3X-01	3.3	100	5,10	30	300	6000	0.05	1000
1206AS-6N8X-01	6.8	100	5,10	37	300	5500	0.07	1000
1206AS-010X-01	10	100	5,10	40	300	4000	0.08	1000
1206AS-012X-01	12	100	5,10	51	300	3200	0.08	1000
1206AS-015X-01	15	100	5,10	51	300	3200	0.1	1000
1206AS-018X-01	18	100	5,10	51	300	2800	0.1	1000
1206AS-022X-01	22	100	5,10	52	300	2200	0.1	1000
1206AS-027X-01	27	100	5,10	52	300	1800	0.11	1000
1206AS-033X-01	33	100	5,10	56	300	1800	0.11	1000
1206AS-039X-01	39	100	5,10	64	300	1800	0.12	1000
1206AS-047X-01	47	100	5,10	64	300	1500	0.13	1000
1206AS-056X-01	56	100	5,10	64	300	1450	0.14	1000
1206AS-068X-01	68	100	5,10	61	300	1200	0.26	900
1206AS-082X-01	82	100	2,5,10	66	300	1200	0.21	900
1206AS-R10X-01	100	100	2,5,10	55	300	1100	0.26	850
1206AS-R12X-01	120	100	2,5,10	75	300	1100	0.26	800
1206AS-R15X-01	150	100	2,5,10	65	300	950	0.31	750
1206AS-R18X-01	180	50	2,5,10	75	300	900	0.43	700
1206AS-R22X-01	220	50	2,5,10	75	300	760	0.5	670
1206AS-R27X-01	270	50	2,5,10	57	300	730	0.56	630
1206AS-R33X-01	330	50	5,10	55	150	650	0.62	590
1206AS-R39X-01	390	50	5,10	55	150	600	0.75	530
1206AS-R47X-01	470	50	5,10	52	150	550	1.3	490
1206AS-R56X-01	560	50	5,10	45	150	470	1.34	460
1206AS-R68X-01	680	35	5,10	45	150	450	1.58	430
1206AS-R82X-01	820	35	5,10	45	150	420	1.82	400
1206AS-1R0X-01	1000	35	5,10	45	150	400	2.8	320
1206AS-1R2X-01	1200	35	5,10	45	150	380	3.2	300
1206AS-2R2X-01	2200	35	5,10	32	150	160	4.5	280
1206AS-3R3X-01	3300	35	5,10	20	50	140	6.5	130
1206AS-4R7X-01	4700	35	5,10	20	50	120	7.2	120

Material : Ceramic

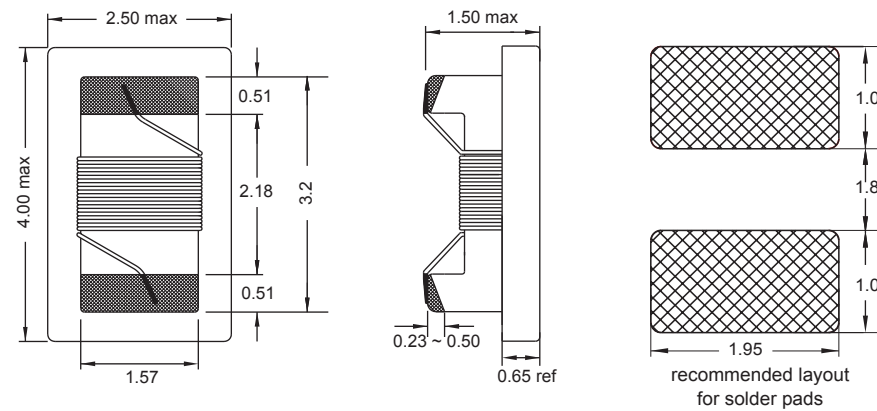
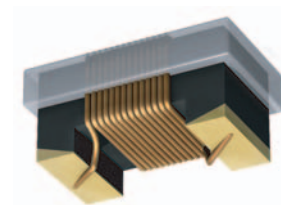
SPQ : Reel 2000 [-01]

Remark: For not listed inductance values please check availability with us.



# 1206 F

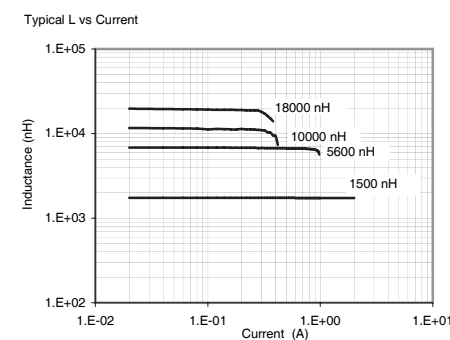
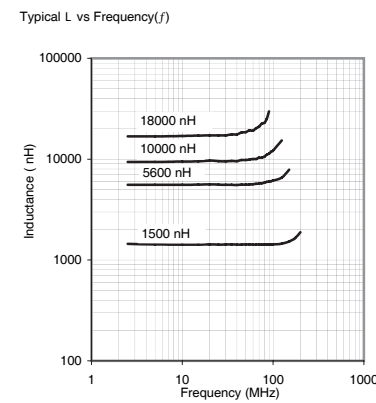
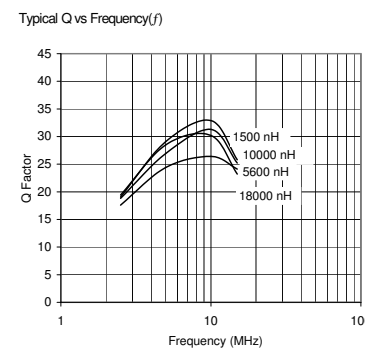
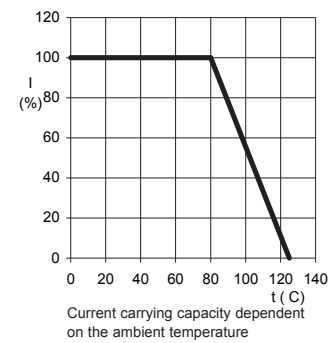
Engineer's Kit : EK-1206F-X



Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>a</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current max (mA)
1206F-1R5X-01	1.5	7.9	5,10	25	7.9	240	1.2	320
1206F-1R8X-01	1.8	7.9	5,10	25	7.9	200	1.2	320
1206F-2R2X-01	2.2	7.9	5,10	25	7.9	200	1.3	300
1206F-2R7X-01	2.7	7.9	5,10	25	7.9	190	1.4	300
1206F-3R3X-01	3.3	7.9	5,10	25	7.9	160	1.5	280
1206F-3R9X-01	3.9	7.9	5,10	25	7.9	160	1.9	280
1206F-4R7X-01	4.7	7.9	5,10	25	7.9	140	2.2	280
1206F-5R6X-01	5.6	7.9	5,10	25	7.9	120	2.4	260
1206F-6R8X-01	6.8	7.9	5,10	25	7.9	110	2.8	240
1206F-8R2X-01	8.2	7.9	5,10	25	7.9	100	3.1	220
1206F-100X-01	10	7.9	5,10	25	7.9	100	4	200
1206F-120X-01	12	2.5	5,10	18	2.5	90	4.6	200
1206F-150X-01	15	2.5	5,10	16	2.5	75	8.2	160
1206F-180X-01	18	2.5	5,10	16	2.5	75	9	130
1206F-470X-01	47	2.5	5,10	18	2.5	25	11.1	80
1206F-101X-01	100	2.5	5,10	18	2.5	23	23.5	80

Material : Ferrite  
 SPQ : Reel 2000 [-01]

Remarks: - For not listed inductance values please check availability with us.  
 - 2% available on request.

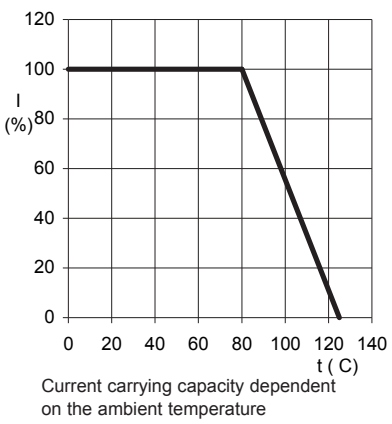
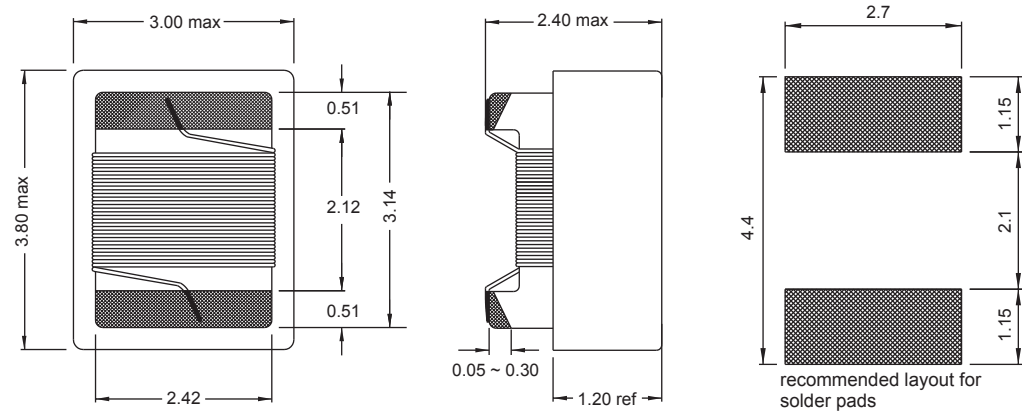
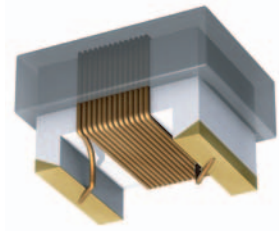


All dimensions in mm

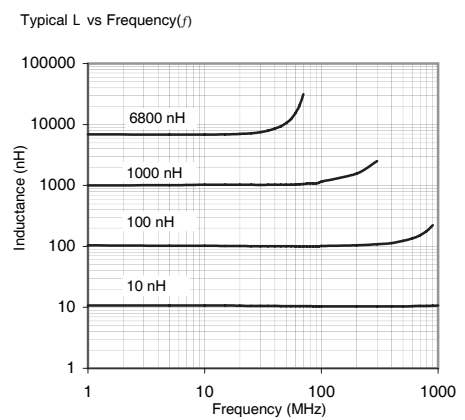
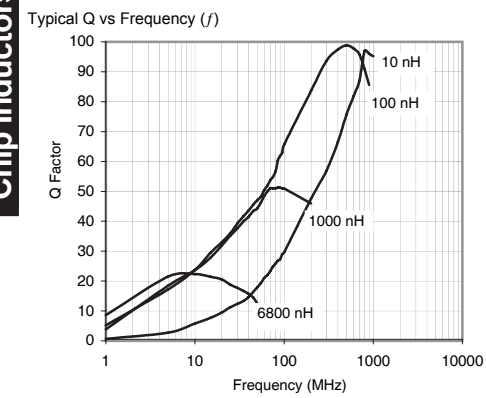
Chip Inductors (wire wound - open)

# 1210 AS

Engineer's Kit : EK-1210AS-X



All dimensions in mm  
Chip Inductors (wire wound - open)



Part No	Inductance L (nH)	f <sub>l</sub> (MHz)	Tol ± (%)	Q min	f <sub>o</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current max (mA)
1210AS-010K-01	10	50	10	50	500	4100	0.08	1000
1210AS-012X-01	12	50	5,10	50	500	2400	0.09	1000
1210AS-015X-01	15	50	5,10	50	500	2400	0.1	1000
1210AS-018X-01	18	50	5,10	50	350	2400	0.11	1000
1210AS-022X-01	22	50	5,10	55	350	2400	0.12	1000
1210AS-027X-01	27	50	5,10	55	350	1800	0.13	1000
1210AS-033X-01	33	50	5,10	60	350	1600	0.14	1000
1210AS-039X-01	39	50	5,10	60	350	1500	0.15	1000
1210AS-047X-01	47	50	5,10	65	350	1200	0.16	1000
1210AS-056X-01	56	50	5,10	65	350	1200	0.16	1000
1210AS-068X-01	68	50	5,10	65	350	1000	0.2	1000
1210AS-082X-01	82	50	5,10	60	350	1000	0.22	1000
1210AS-R10X-01	100	25	5,10	60	350	1000	0.24	980
1210AS-R12X-01	120	25	5,10	60	350	850	0.26	920
1210AS-R15X-01	150	25	5,10	50	100	750	0.29	870
1210AS-R18X-01	180	25	5,10	50	100	700	0.31	830
1210AS-R22X-01	220	25	5,10	50	100	650	0.35	790
1210AS-R27X-01	270	25	5,10	45	100	600	0.42	730
1210AS-R33X-01	330	25	5,10	45	100	500	0.49	680
1210AS-R39X-01	390	25	5,10	45	100	500	0.54	640
1210AS-R47X-01	470	25	5,10	45	100	450	0.6	610
1210AS-R56X-01	560	25	5,10	45	100	415	1	460
1210AS-R68X-01	680	25	5,10	45	100	350	1.15	420
1210AS-R82X-01	820	25	5,10	45	100	350	1.93	350
1210AS-1R0X-01	1000	25	5,10	35	50	290	2.16	330
1210AS-1R2X-01	1200	7.9	5,10	35	50	250	2.38	310
1210AS-1R5X-01	1500	7.9	5,10	25	50	200	2.64	300
1210AS-1R8X-01	1800	7.9	5,10	25	50	160	2.76	290
1210AS-2R2X-01	2200	7.9	5,10	25	50	160	2.98	280
1210AS-2R7X-01	2700	7.9	5,10	25	25	140	3.3	260
1210AS-3R3X-01	3300	7.9	5,10	25	25	120	3.66	250
1210AS-3R9X-01	3900	7.9	5,10	20	25	100	4	240
1210AS-4R7X-01	4700	7.9	5,10	20	25	90	4.3	230
1210AS-5R6X-01	5600	7.9	5,10	15	25	60	4.3	230
1210AS-6R8X-01	6800	7.9	5,10	15	25	60	5.2	210
1210AS-8R2X-01	8200	7.9	5,10	17	7.9	45	5.9	168
1210AS-100X-01	10000	7.9	5,10	17	7.9	38	6	160
1210AS-150X-01	15000	7.9	5,10	15	7.9	20	7	120

Material : Ceramic  
SPQ : Reel 800 [-01]

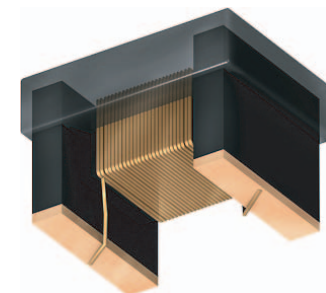
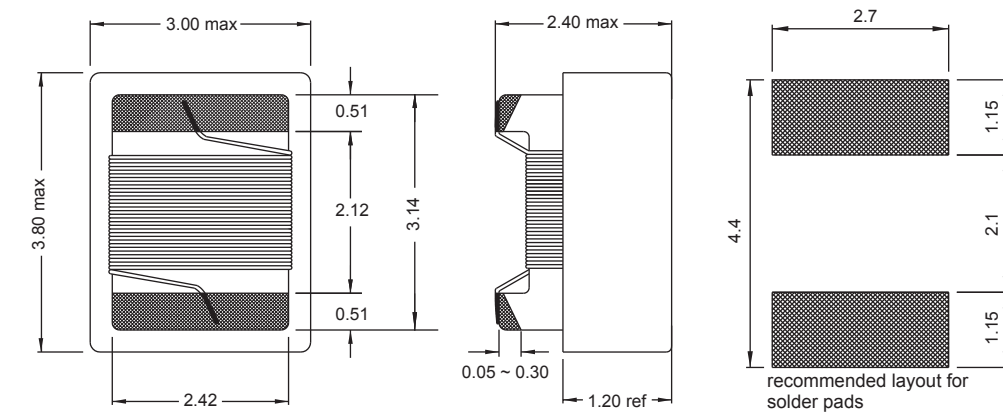
Remark: For not listed inductance values please check availability with us.





# 1210 F

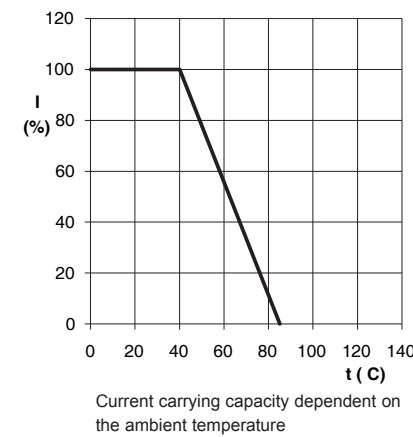
Engineer's Kit : EK-1210F-X



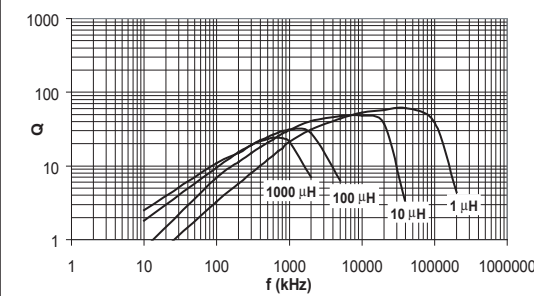
Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>0</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current max (mA)
1210F-R10X-01	0.1	25	10	40	25	375	0.15	1131
1210F-1R0X-01	1	1	5,10	30	7.96	200	0.28	600
1210F-1R2X-01	1.2	1	5,10	30	7.96	200	0.32	560
1210F-1R5X-01	1.5	1	5,10	30	7.96	200	0.34	535
1210F-1R8X-01	1.8	1	5,10	30	7.96	150	0.41	490
1210F-2R2X-01	2.2	1	5,10	30	7.96	150	0.43	480
1210F-2R7X-01	2.7	1	5,10	30	7.96	150	0.49	450
1210F-3R3X-01	3.3	1	5,10	30	7.96	90	0.55	425
1210F-3R9X-01	3.9	1	5,10	30	7.96	80	0.59	410
1210F-4R7X-01	4.7	1	5,10	30	7.96	70	0.65	390
1210F-5R6X-01	5.9	1	5,10	30	7.96	40	0.71	375
1210F-6R8X-01	6.8	1	5,10	27	7.96	28	0.78	360
1210F-8R2X-01	8.2	1	5,10	27	7.96	25	0.92	330
1210F-100X-01	10	1	5,10	27	2.52	15	0.98	320
1210F-120X-01	12	0.1	5,10	27	2.52	13	1.1	300
1210F-150X-01	15	0.1	5,10	27	2.52	12	1.25	280
1210F-180X-01	18	0.1	5,10	27	2.52	11	1.35	270
1210F-220X-01	22	0.1	5,10	27	2.52	10	1.45	260
1210F-270X-01	27	0.1	5,10	26	2.52	9	1.65	245
1210F-330X-01	33	0.1	5,10	25	2.52	8	1.85	230
1210F-390X-01	39	0.1	5,10	25	2.52	7	2.05	220
1210F-470X-01	47	0.1	5,10	25	2.52	6.5	2.3	210
1210F-560X-01	56	0.1	5,10	24	2.52	6	2.5	200
1210F-680X-01	68	0.1	5,10	23	2.52	5.5	2.8	190
1210F-820X-01	82	0.1	5,10	22	2.52	5	3.2	175
1210F-101X-01	100	0.1	5,10	22	2.52	4.5	4.7	145
1210F-121X-01	120	0.1	5,10	30	0.796	4.2	5.2	140
1210F-151X-01	150	0.1	5,10	30	0.796	4	6.1	130
1210F-181X-01	180	0.1	5,10	27	0.796	3.6	6.9	120
1210F-221X-01	220	0.1	5,10	25	0.796	3.3	7.5	115
1210F-271X-01	270	0.1	5,10	23	0.796	3	12.5	90
1210F-331X-01	330	0.1	5,10	23	0.796	2.8	14.1	85
1210F-391X-01	390	0.1	5,10	23	0.796	2.5	15.3	80
1210F-471X-01	470	0.1	5,10	22	0.796	2.3	20.5	75
1210F-561X-01	560	0.1	5,10	22	0.796	2.2	23	70
1210F-681X-01	680	0.1	5,10	22	0.796	1.9	25	65
1210F-821X-01	820	0.1	5,10	20	0.796	1.7	28	60
1210F-102X-01	1000	0.1	5,10	18	0.796	1.6	32	55

Material : Ferrite  
 SPQ : Reel 800 [-01]

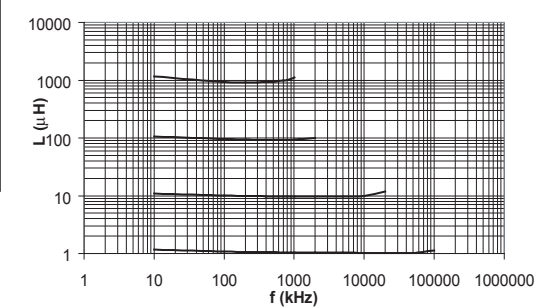
Remarks: - For not listed inductance values please check availability with us.  
 - 2% available on request.



Typical Q vs Frequency (f)



Typical L vs Frequency (f)

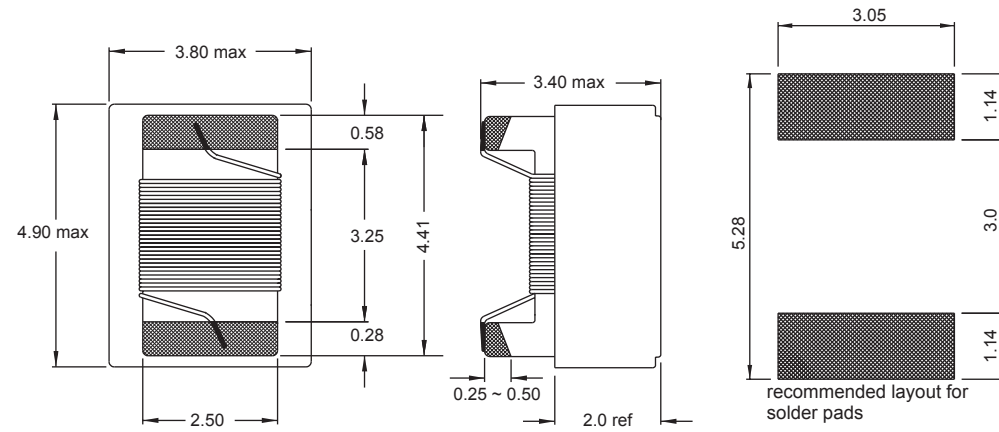
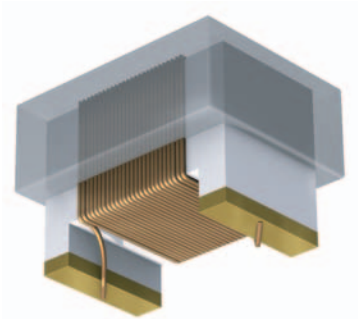


All dimensions in mm

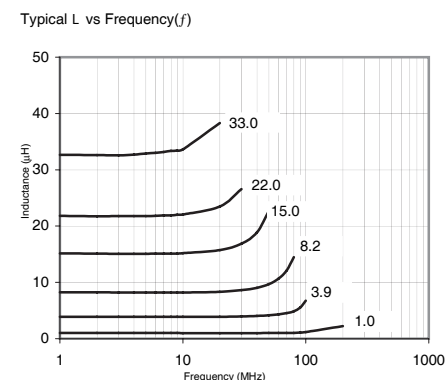
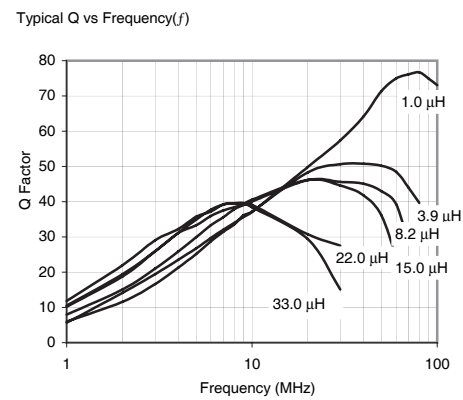
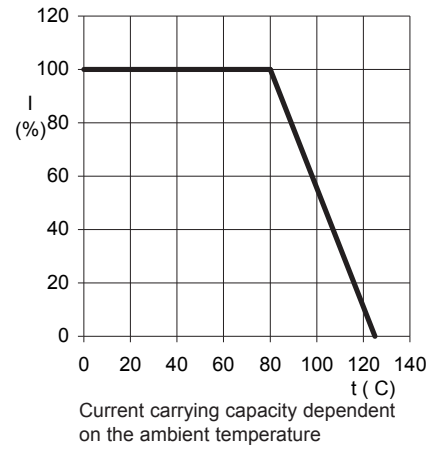
Chip Inductors (wire wound - open)

# 1812 AS

Engineer's Kit : EK-1812AS-X



All dimensions in mm  
Chip Inductors (wire wound - open)

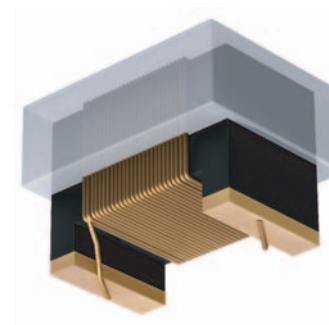
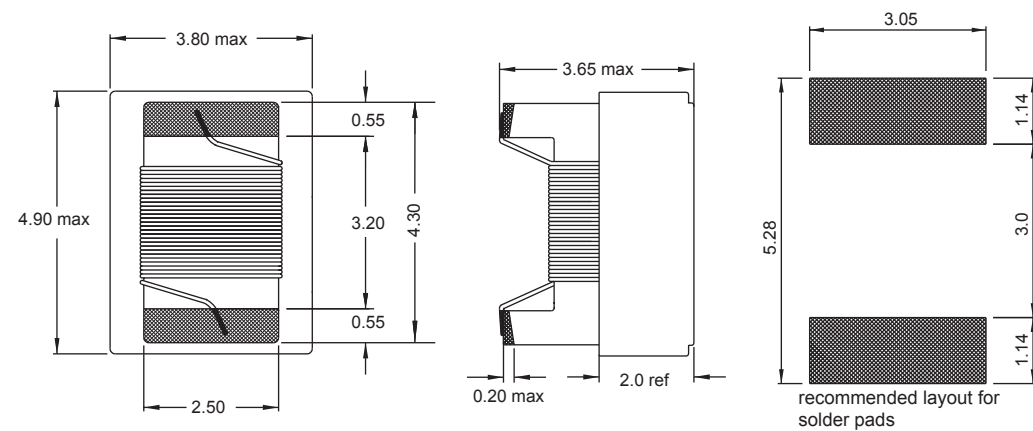
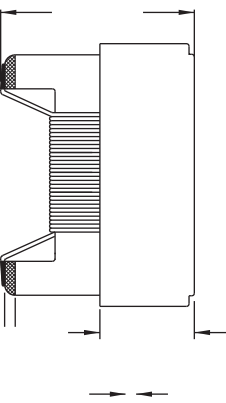


Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>a</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
1812AS-1R0X-01	1.0	7.9	5,10	62	50	277	1.2	480
1812AS-1R2X-01	1.2	7.9	5,10	60	50	240	1.2	480
1812AS-1R5X-01	1.5	7.9	5,10	60	50	220	1.6	430
1812AS-1R8X-01	1.8	7.9	5,10	60	50	200	2	380
1812AS-2R2X-01	2.2	7.9	5,10	63	50	180	2.2	340
1812AS-2R7X-01	2.7	7.9	5,10	63	50	160	3.2	300
1812AS-3R3X-01	3.3	7.9	5,10	50	50	145	3.8	270
1812AS-3R9X-01	3.9	7.9	5,10	50	50	130	5	240
1812AS-4R7X-01	4.7	7.9	5,10	50	50	120	5.4	230
1812AS-5R6X-01	5.6	7.9	5,10	40	50	105	5.7	220
1812AS-6R8X-01	6.8	7.9	5,10	40	50	103	6.6	210
1812AS-8R2X-01	8.2	7.9	5,10	38	50	94	7	200
1812AS-100X-01	10	7.9	5,10	38	50	80	7.7	190
1812AS-120X-01	12	2.5	5,10	38	10	74	8.7	180
1812AS-150X-01	15	2.5	5,10	37	10	59	9.6	170
1812AS-180X-01	18	2.5	5,10	36	10	59	10.5	160
1812AS-220X-01	22	2.5	5,10	36	10	45	13	155
1812AS-270X-01	27	2.5	5,10	36	10	35	14	150
1812AS-330X-01	33	2.5	5,10	36	10	35	15.5	145
1812AS-390X-01	39	2.5	5,10	36	10	25	23.5	80
1812AS-470X-01	47	2.5	5,10	32	10	20	39	80
1812AS-560X-01	56	2.5	5,10	32	10	20	41	60
1812AS-680X-01	68	2.5	5,10	32	10	18	54	58
1812AS-820X-01	82	2.5	5,10	32	10	15	59	55

Material : Ceramic  
SPQ : Reel 600 [-01]

Remark: For not listed inductance values please check availability with us.

**1812 AF**  
Engineer's Kit : EK-1812AF-X

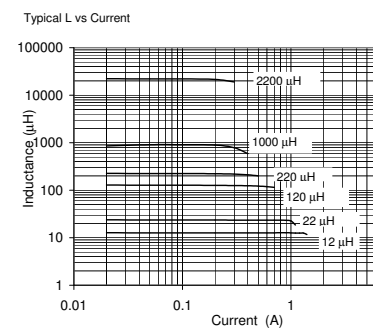
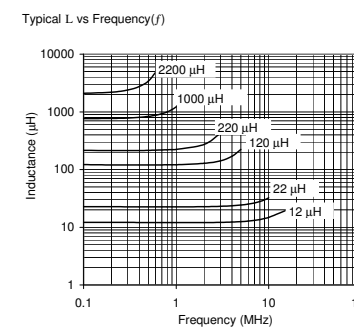
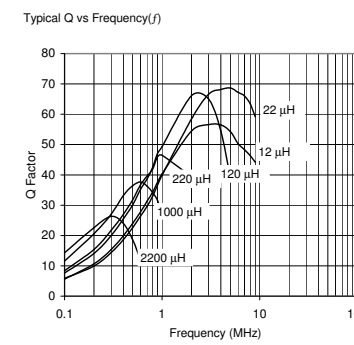
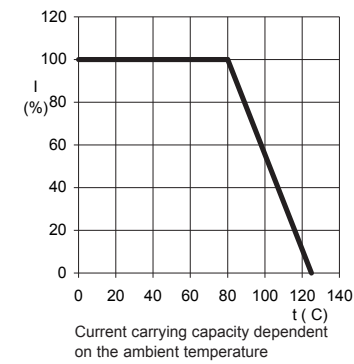


Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
1812AF-100X-01	10	2.5	5.10	42	2.5	23	1.8	310
1812AF-120X-01	12	2.5	5.10	42	2.5	40	2	310
1812AF-150X-01	15	2.5	5.10	42	2.5	40	2.5	290
1812AF-180X-01	18	2.5	5.10	45	2.5	40	2.8	270
1812AF-220X-01	22	2.5	5.10	45	2.5	40	3.2	260
1812AF-270X-01	27	2.5	5.10	45	2.5	36	3.6	240
1812AF-330X-01	33	2.5	5.10	45	2.5	34	4	230
1812AF-390X-01	39	2.5	5.10	45	2.5	32	4.5	210
1812AF-470X-01	47	2.5	5.10	42	2.5	30	5	200
1812AF-560X-01	56	2.5	5.10	42	2.5	27	5.5	190
1812AF-680X-01	68	2.5	5.10	40	2.5	23	6	180
1812AF-820X-01	82	2.5	5.10	40	2.5	19	7	170
1812AF-101X-01	100	0.79	5.10	33	0.79	11	11.5	135
1812AF-121X-01	120	0.79	5.10	36	0.79	10	13	125
1812AF-151X-01	150	0.79	5.10	36	0.79	9	14.2	120
1812AF-181X-01	180	0.79	5.10	38	0.79	6	16.2	115
1812AF-221X-01	220	0.79	5.10	38	0.79	4.5	20.5	105
1812AF-271X-01	270	0.79	5.10	38	0.79	3.5	22.5	100
1812AF-331X-01	330	0.79	5.10	38	0.79	3	24.5	90
1812AF-391X-01	390	0.79	5.10	33	0.79	2	26.5	85
1812AF-471X-01	470	0.79	5.10	33	0.79	1.8	28.5	75
1812AF-561X-01	560	0.79	5.10	27	0.79	1.6	38	60
1812AF-681X-01	680	0.79	5.10	27	0.79	1.7	41	55
1812AF-821X-01	820	0.252	5.10	18	0.252	0.8	44	50
1812AF-102X-01	1000	0.252	5.10	18	0.252	0.8	60	42
1812AF-122X-01	1200	0.252	5.10	18	0.252	0.62	84	32
1812AF-222X-01	2200	0.252	5.10	18	0.252	0.62	84	32

**Material :** Ceramic & Ferrite

**SPQ :** Reel 600 [-01]

**Remark:** For not listed inductance values please check availability with us.



All dimensions in mm

Chip Inductors (wire wound - open)

## Transponder Coils (for RFID)

Our surface mount transponder coils (wire wound) series cover a wide range of electrical performances. Its length and cross section area are optimized for best sensitivity in the coil axis. Customized inductance values are available on request.

**Applications** Used for wireless data transmission in low frequency RFID products, such as immobilizers, TPMS, keyless entry. Other industrial applications include access control and tracking devices.

Technical Data	
L – Value (rated inductance)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_L$
Q – Factor (min)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_Q$
SRF (min)	Measured with HP 8714 RF Network Analyzer
DCR (max)	Measured at 25°C
Operating Temperature	from -40°C to +125°C (includes component self-heating)
Surface Finishing	Epoxy moulded flat top for perfect pick and place assembly, except 4513FP with sticker
Pad Metallization	Gold flash as top layer, except 4513FP with tin plating
Wire termination	Spot welding
Recommended soldering method	Reflow
Solderability	Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
Resistance to Soldering Heat	Resistant to 260°C ± 5°C for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb)
Resistance to Solvent	Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45
Climatic Test	Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: 125°C for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
Thermal Shock Test	Temperature cycle: -40°C to +125°C to -40°C Max/Min temperature duration: 15 min Temperature transition duration: 5 min Cycles: 25 Standard: MIL-STD-202G
Shear Test	Components withstand a pushing force of 10N for 10 ± 1 seconds Standard: IEC 60068-2-21, method Ue3
Mechanical Shock	Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

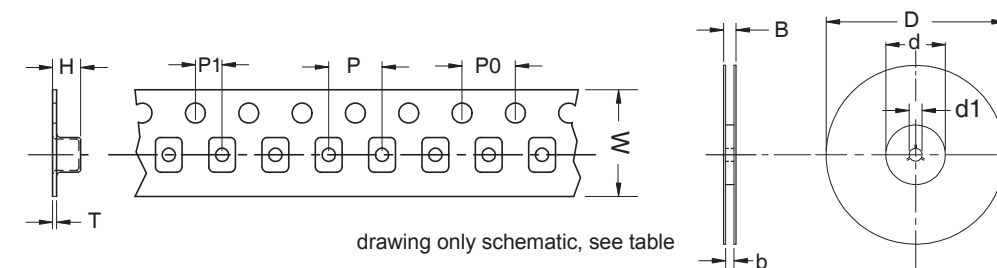
All dimensions in mm

Technical Data & Packing Spec

**Ordering Code** Example: **4408AF-371X-04**  
 (Case Size) (Core Type) (Inductance Value) (Tolerance) (Packing Code)

- Case Size - 1206, 1812, 4513, 4408
- Core Type - FTC (Ferrite), AFTC (Ceramic & Ferrite), FP (Plastic Ferrite), AF (Ceramic & Ferrite)
- Tolerances - J (5%), K (10%), M (20%)  
 - **Bold is standard tolerance**
- Packing Code - 01, 04, 08 (Reel)

### Packing Specification

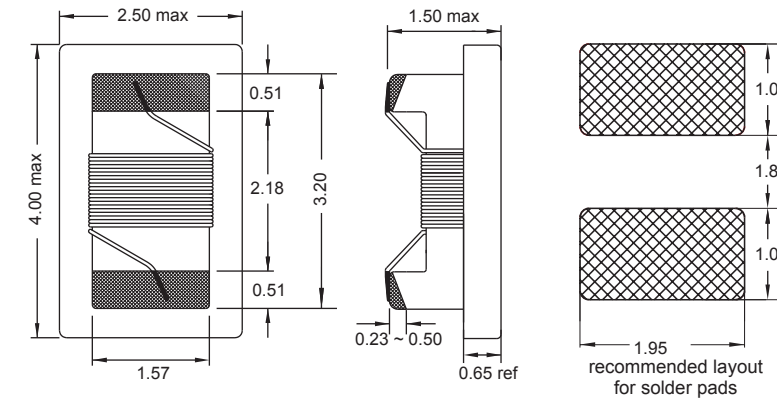
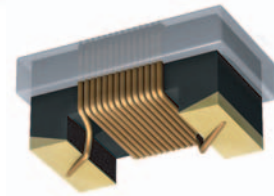


Type	D	d	d1	B	b	W	P	P0	P1	H	T
1206 FTC	180	60	13	12.7	8.4	8	4	4	2	2.5	0.2
1812 AFTC	180	60	13	18.4	15.4	12	8	4	2	4.28	0.28
4513 FP	330	100	13	30.4	24.5	24	8	4	2	2.5	0.35
4408 AF	330	100	13	30.4	24.5	24	8	4	2	2.7	0.35



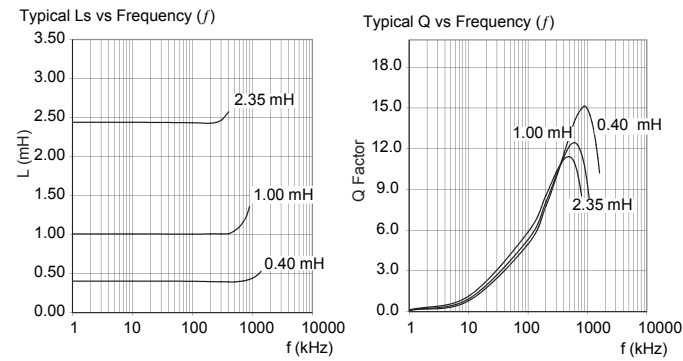


**1206 FTC**  
Low Profile Transponder Coil



Part No	Inductance L (mH)	f <sub>L</sub> (kHz)	Tol ± (%)	Q typ	f <sub>Q</sub> (kHz)	SRF min (kHz)
1206FTC-401X-01	0.4	125	5,10	5	125	2000
1206FTC-102X-01	1	125	5,10	6	125	1200
1206FTC-242X-01	2.38	125	5,10	7	125	950

Material : Ferrite  
SPQ : Reel 2000 [-01]  
Remark: 2% available on request.

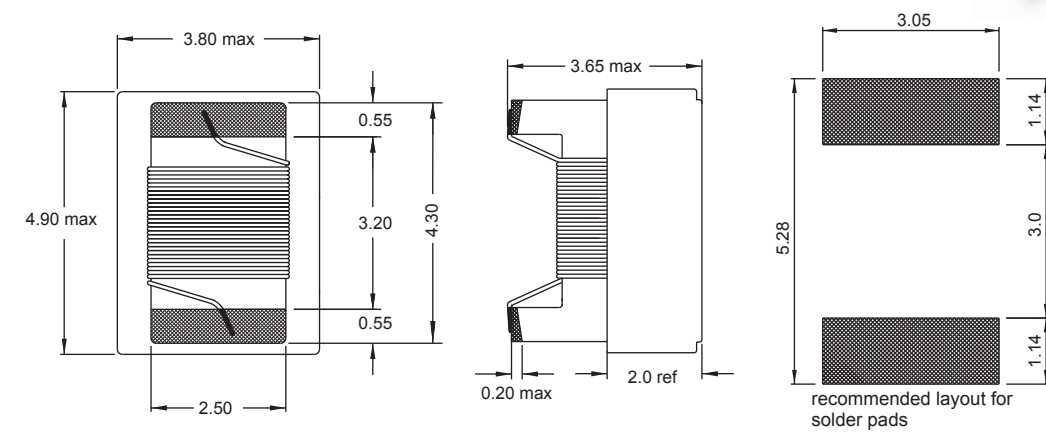
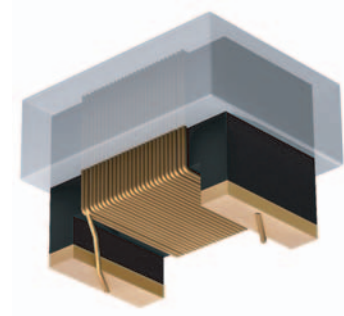


All dimensions in mm

Transponder Coils

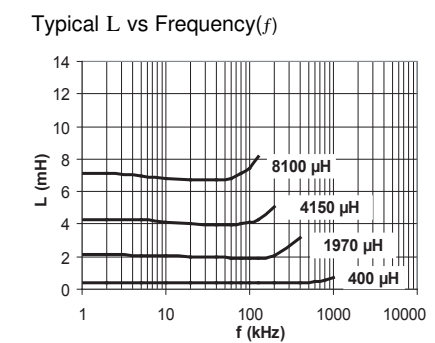
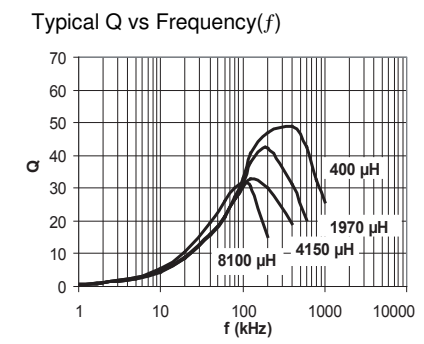
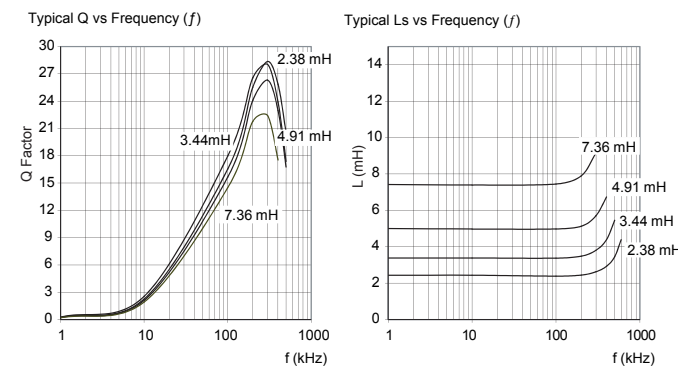


**1812 AFTC**  
High Q - Small Package Transponder Coil



Part No	Inductance L (mH)	f <sub>L</sub> (kHz)	Tol ± (%)	Q typ	f <sub>Q</sub> (MHz)	SRF min (MHz)
1812AFTC-242X-01	2.38	125	5,10	19	125	650
1812AFTC-292X-01	2.89	125	5,10	19	125	620
1812AFTC-342X-01	3.44	125	5,10	19	125	600
1812AFTC-412X-01	4.15	125	5,10	19	125	600
1812AFTC-492X-01	4.91	125	5,10	18	125	560
1812AFTC-602X-01	6	125	5,10	18	125	530
1812AFTC-722X-01	7.2	125	5,10	16	125	470
1812AFTC-742X-01	7.36	125	5,10	16	125	470

Material : Ceramic & Ferrite  
SPQ : Reel 600 [-01]  
Remark: 2% available on request.





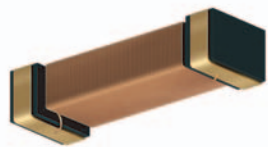
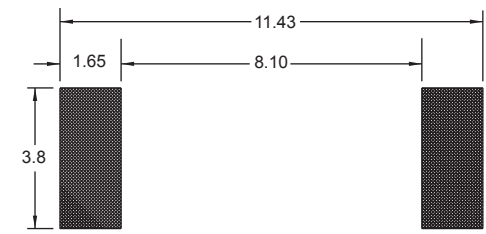
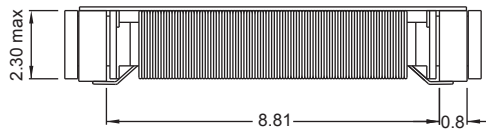
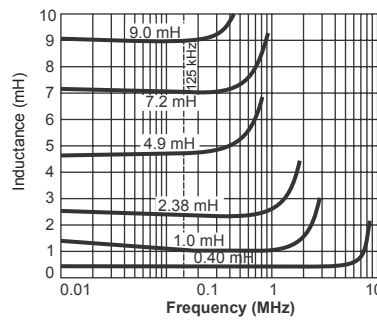
# 4513 FP

New

Very Robust Transponder Coil

Preliminary Spec

Typical L vs Frequency



very robust design

Part No	Inductance L (mH)	f <sub>L</sub> (kHz)	Tol ± (%)	Q min	f <sub>α</sub> (kHz)	Read distance (cm)	Sensitivity (mV/μT)	DCR max (Ω)	SRF typ (kHz)
4513FP-401X-04	0.40	125	5,10	21	125	50	9	11.5	6340
4513FP-102X-04	1.00	125	5,10	21	125	62	15	29	4150
4513FP-242X-04	2.38	125	5,10	26	125	72	25	55	2470
4513FP-492X-04	4.90	125	5,10	24	125	83	42	103	1270
4513FP-722X-04	7.20	125	5,10	30	125	89	60	128	1465
4513FP-900X-04	9.00	125	5,10	32	125	91	78	150	1200

Material : Plastic & Ferrite

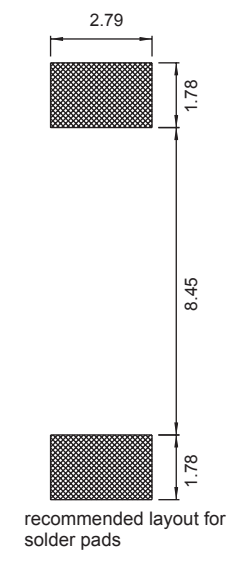
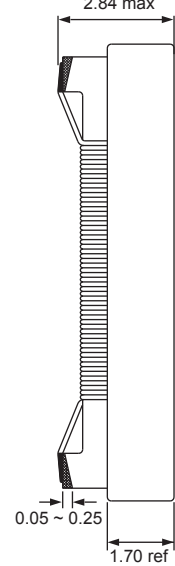
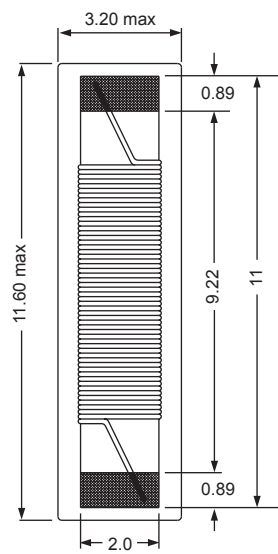
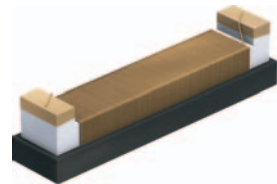
Remark: 2% available on request.

SPQ : Reel 3000 [-04]

1000 [-08]

# 4408 AF

Transponder Coil



recommended layout for solder pads

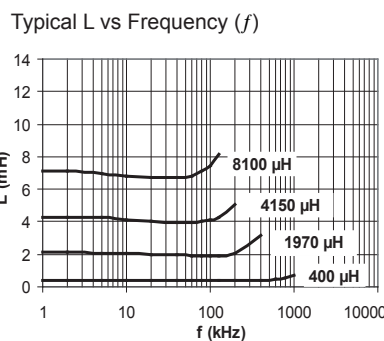
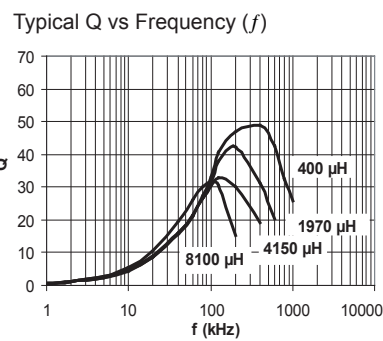
Part No	Inductance L (mH)	f <sub>L</sub> (kHz)	Tol ± (%)	Q min	f <sub>α</sub> (kHz)	SRF (kHz) ref	DCR max (Ω)
4408AF-371X-04	0.37	125	5,10	27	125	1200	6.4
4408AF-401X-04	0.4	125	5,10	27	125	1100	6.8
4408AF-421X-04	0.42	125	5,10	27	125	1100	8.1
4408AF-511X-04	0.51	125	5,10	27	125	1000	8.5
4408AF-701X-04	0.7	125	5,10	30	125	821	12
4408AF-901X-04	0.9	125	5,10	28	125	760	13.9
4408AF-112X-04	1.08	125	5,10	31	125	710	15
4408AF-202X-04	1.97	125	5,10	30	125	630	29.7
4408AF-242X-04	2.38	125	5,10	32	125	560	30.8
4408AF-292X-04	2.89	125	5,10	35	125	530	35.2
4408AF-332X-04	3.3	125	5,10	35	125	450	48
4408AF-343X-04	3.45	125	5,10	29	125	430	60
4408AF-412X-04	4.15	125	5,10	29	125	400	70
4408AF-472X-04	4.7	125	5,10	29	125	380	70
4408AF-482X-04	4.8	125	5,10	29	125	380	80
4408AF-492X-04	4.9	125	5,10	29	125	380	80
4408AF-562X-04	5.6	125	5,10	28	125	350	80
4408AF-682X-04	6.8	125	5,10	28	125	345	95
4408AF-702X-04	7	125	5,10	30	125	340	100
4408AF-712X-04	7.1	125	5,10	30	125	340	100
4408AF-722X-04	7.2	125	5,10	30	125	335	86.4
4408AF-812X-04	8.1	125	5,10	28	125	310	125
4408AF-952X-04	9.5	20	5,10	8	20	310	111.6
4408AF-103X-04	10	125	5,10	30	125	310	111.6
4408AF-133X-04	13.5	125	5,10	30	125	200	130
4408AF-163X-04	16.2	125	5,10	30	125	200	175

Material : Ceramic & Ferrite

Remark: 2% available on request.

SPQ : Reel 3000 [-04]

1000 [-08]



All dimensions in mm

Transponder Coils



## Moulded Inductors

FASTRON Moulded Inductor CCS series always provides a great alternative whenever you need a very high inductance inductor to come in a SMD package. The CCS Series has tin plated terminations and is encapsulated with high temperature resistance material suitable to work in tough environments. The inductances range from 1uH to up 33000uH.

**Applications** This SMD part has:  
Some of them include medical, automotive and communication products.

Technical Data	
L – Value (rated inductance)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_L$
Q – Factor (min)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_Q$
SRF (min)	Measured with HP 8714 RF Network Analyzer
DCR (max)	Measured at 25°C
Rated DC Current	I1 max. current based on ambient temperature of 40°C and component temperature of max. 125°C
Operating Temperature	-55°C to +125°C (includes component self-heating)
Recommended soldering method	Reflow
Solderability	Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
Resistance to Soldering Heat	Resistant to 260°C ± 5°C for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb)
Resistance to Solvent	Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45
Climatic Test	Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: +125°C for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
Thermal Shock Test	Temperature cycle : -55°C to +125°C to -55°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G
Shear Test	Components withstand a pushing force of 10N for 10 ± 1 seconds Standard: IEC 60068-2-21, method Ue3
Mechanical Shock	Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

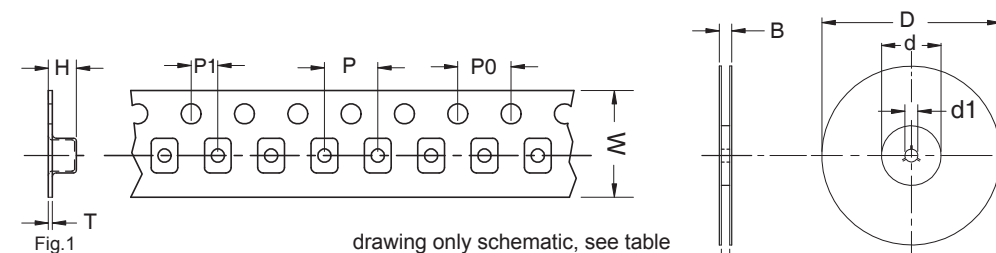
All dimensions in mm

Technical Data & Packing Spec

**Ordering Code** Example: **CCSH-1N0X-04**    **CCS**    **H**    -    **1N0**    **X**    -    **04**  
(Model)(Case Size)    (Inductance Value) (Tolerance)    (Packing Code)

Case Sizes    - H (15.2\*6.1\*6.0) mm, S (12.6\*4.4\*4.5) mm  
Tolerances    - J (5%), K (10%), M (20%)  
                    - **Bold is standard tolerance**  
Packing Code - 04 (Reel)

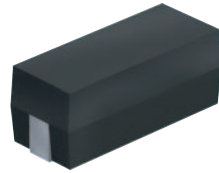
### Packing Specification



Type	D	d	d1	B	b	W	P	P0	P1	H	T
CCSH	330	100	13	30.4	24.4	24	12	4	2	7.3	0.4
CCSS	330	100	13	30.4	24.4	24	8	4	2	5.4	0.4

**CCSH**

Similar to axial HBCC, page 40

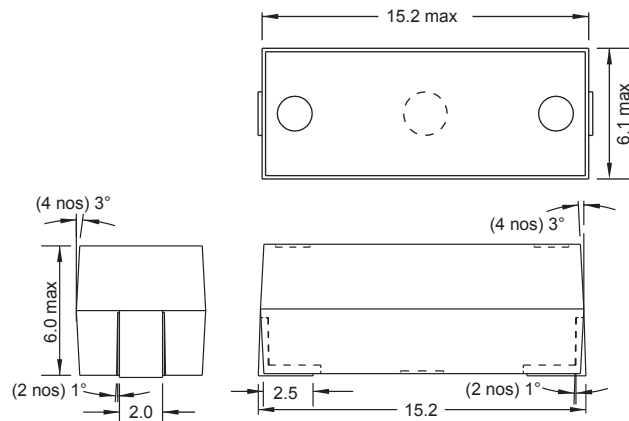


Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>0</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)
CCSH-100K-04	10	0.1	10	55	2.52	18	0.17	1.4
CCSH-120K-04	12	0.1	10	55	2.52	13	0.2	1.3
CCSH-150K-04	15	0.1	10	55	2.52	9	0.23	1.25
CCSH-180K-04	18	0.1	10	45	2.52	8.5	0.25	1.2
CCSH-220K-04	22	0.1	10	45	2.52	8	0.29	1.1
CCSH-270K-04	27	0.1	10	45	2.52	7.5	0.31	1
CCSH-330K-04	33	0.1	10	45	2.52	6.7	0.38	0.9
CCSH-390X-04	39	0.1	5,10	40	2.52	6.2	0.41	0.85
CCSH-470X-04	47	0.1	5,10	35	2.52	5.8	0.44	0.8
CCSH-560X-04	56	0.1	5,10	35	2.52	5.1	0.49	0.75
CCSH-680X-04	68	0.1	5,10	30	2.52	4.8	0.65	0.7
CCSH-820X-04	82	0.1	5,10	30	2.52	4.2	0.68	0.65
CCSH-101X-04	100	0.02	5,10	45	0.796	4	0.7	0.6
CCSH-121X-04	120	0.02	5,10	50	0.796	3.4	0.8	0.55
CCSH-151X-04	150	0.02	5,10	50	0.796	3	0.9	0.5
CCSH-181X-04	180	0.02	5,10	50	0.796	2.6	0.95	0.45
CCSH-221X-04	220	0.02	5,10	50	0.796	2.2	1.2	0.4
CCSH-271X-04	270	0.02	5,10	45	0.796	1.8	1.3	0.37
CCSH-331X-04	330	0.02	5,10	40	0.796	1.6	1.7	0.33
CCSH-391X-04	390	0.02	5,10	40	0.796	1.5	1.9	0.31
CCSH-471X-04	470	0.02	5,10	35	0.796	1.38	2.5	0.28
CCSH-561X-04	560	0.02	5,10	25	0.796	1.25	2.8	0.26
CCSH-681X-04	680	0.02	5,10	20	0.796	1.2	3	0.24
CCSH-821X-04	820	0.02	5,10	20	0.796	1.15	3.4	0.22
CCSH-102X-04	1000	0.02	5,10	45	0.252	1.1	3.8	0.2
CCSH-122X-04	1200	0.02	5,10	55	0.252	1.05	5.3	0.18
CCSH-152X-04	1500	0.02	5,10	55	0.252	1	6	0.16
CCSH-182X-04	1800	0.02	5,10	55	0.252	0.95	6.8	0.14
CCSH-222X-04	2200	0.02	5,10	55	0.252	0.9	7.8	0.12
CCSH-272X-04	2700	0.02	5,10	55	0.252	0.8	11	0.12
CCSH-332X-04	3300	0.02	5,10	55	0.252	0.65	13	0.11
CCSH-392X-04	3900	0.02	5,10	55	0.252	0.62	18	0.1
CCSH-472X-04	4700	0.02	5,10	55	0.252	0.6	21	0.09
CCSH-682X-04	6800	0.02	5,10	30	0.252	0.4	32	0.08
CCSH-103X-04	10000	0.02	5,10	45	0.0796	0.35	40	0.06
CCSH-333X-04	33000	0.02	5,10	30	0.0796	0.2	150	0.035

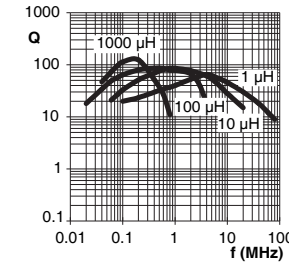
Material : Ferrite  
SPQ : Reel 750 [-04]

Remark : For tax pulse filters same series is available with suitable L-values  
I<sub>1</sub> - see description in Inductors Technical Data

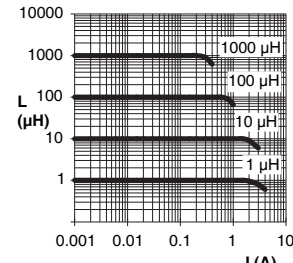
All dimensions in mm



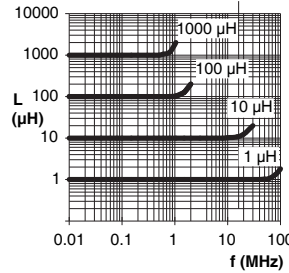
Typical Q vs Frequency (f)



Typical L vs Current

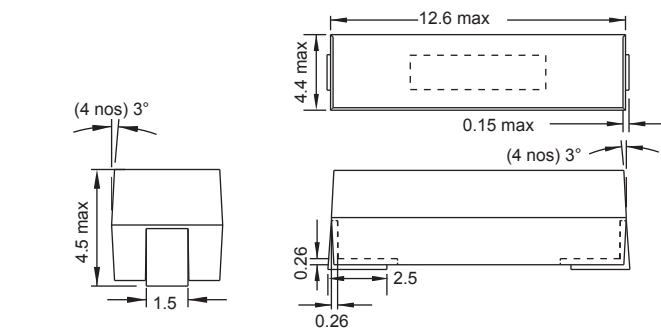
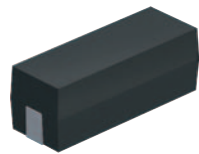


Typical L vs Frequency (f)



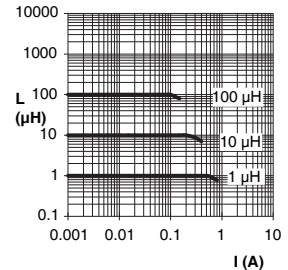
**CCSS**

Similar to axial SMCC, page 36



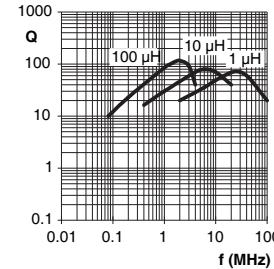
Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>0</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
CCSS-1R0K-04	1	1	10	45	25.2	174	0.16	1200
CCSS-2R2K-04	2.2	1	10	44	7.96	140	0.25	1000
CCSS-4R7K-04	4.7	1	10	48	7.96	95	0.34	820
CCSS-100K-04	10	1	10	65	7.96	35	0.539	680
CCSS-120K-04	12	0.1	10	50	2.52	30	0.55	650
CCSS-470K-04	47	0.1	10	40	2.52	7.5	1.1	450
CCSS-101K-04	100	0.02	10	30	2.52	4.25	1.7	370
CCSS-102K-04	1000	0.02	10	40	0.79	1.36	14	130
CCSS-152X-04	1500	0.02	5,10	40	0.252	1.25	21.6	100
CCSS-182X-04	1800	0.02	5,10	40	0.252	1.2	24	95
CCSS-222X-04	2200	0.02	5,10	40	0.252	1.1	34.7	80
CCSS-472X-04	4700	0.02	5,10	40	0.252	0.7	74	55
CCSS-822X-04	8200	0.02	5,10	25	0.252	0.38	95	30
CCSS-103K-04	10000	0.02	10	20	0.252	0.35	115	25

Typical L vs Current

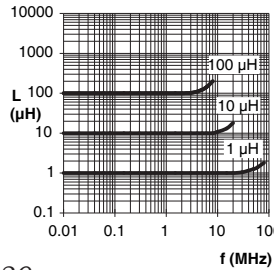


Material : Ferrite  
SPQ : Reel 1700 [-04]

Typical Q vs Frequency (f)



Typical L vs Frequency (f)





## Leaded Inductors (Fixed Choke Coils)

FASTRON leaded inductors come with a very wide inductance range from 0.1µH to 100 000µH and with high Q values. They are available in tape and ammpack packing.

**Applications** These components are suitable for decoupling and interference suppression.  
 Communication: RF blocking and filtering, e.g. 12 ~ 16 kHz blocking filter  
 Others: Automotive electronics, electronic household appliances, entertainment electronics and lighting devices

<b>Technical Data</b>	L – Value (rated inductance)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_l$
	Q – Factor (min)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_0$
	SRF (min)	Measured with HP 8714 RF Network Analyzer
	DCR (max)	Measured at 25°C
	Rated DC Current	I based on temperature rise, determined at the point where the temperature rise does not exceed 40°C above the ambient temperature of 25°C I1 max. current based on ambient temperature of 40°C and component temperature of max. 125°C Isat max. current based on inductivity drop of -10% related to the unloaded inductivity
	Operating Temperature	-55°C to +125°C (includes component self-heating)
	Recommended soldering method	Wave
	Solderability	Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
	Resistance to Soldering Heat	Resistant to 260°C ± 5°C for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb)
	Resistance to Solvent	Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45
	Climatic Test	Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: +125°C for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
	Thermal Shock Test	Temperature cycle : -55°C to +125°C to -55°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G
	Tensile Strength of Leads	Components withstand a pulling force of 10N for 10 ± 1 seconds IEC 60068-2-21 (Ua1)
	Mechanical Shock	Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
	Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

All dimensions in mm

Technical Data & Packing Spec

### Colour Coding

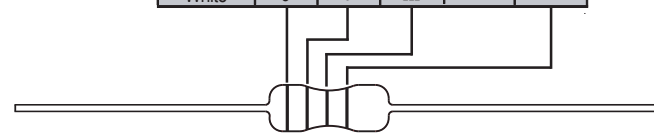
L (µH) Code	Nominal Inductance (µH)				Tol. ** code
	Band 1	Band 2	Band 3	Band 4	
Gold	--	---	x 0.1	± 5 %	J
Silver	--	---	x0.01	± 10 %	K
Clear	--	---	---	± 20 %	M
Black	0	0	x1	---	---
Brown	1	1	x10	± 1 %	F
Red	2	2	x100	± 2 %	G
Orange	3	3	x1000	± 3 %	A
Yellow	4	4	---	---	---
Green	5	5	---	---	---
Blue	6	6	---	---	---
Violet	7	7	---	---	---
Grey	8	8	---	---	---
White	9	9	---	---	---

### Ordering Code

Example: **SMCC-180X-01**

**SMCC** - **180** **X** - **01**  
 (Model) (Inductance Value) (Tolerance) (Packing Code)

- Core Type - Ferrite
- Tolerances - F (1%), G (2%), H (2.5%), A (3%), J (5%), K (10%), M (20%)
- Bold is standard tolerance
- Packing Code - 00 (Loose in Box), 01, 02, 31, 51 (Reel), 02 (Ammopack – axial), 32 (Ammopack – radial)



Packing Specification

Fig. 1: On Reel (Plastic)  
Packing code : 01, 31, 51

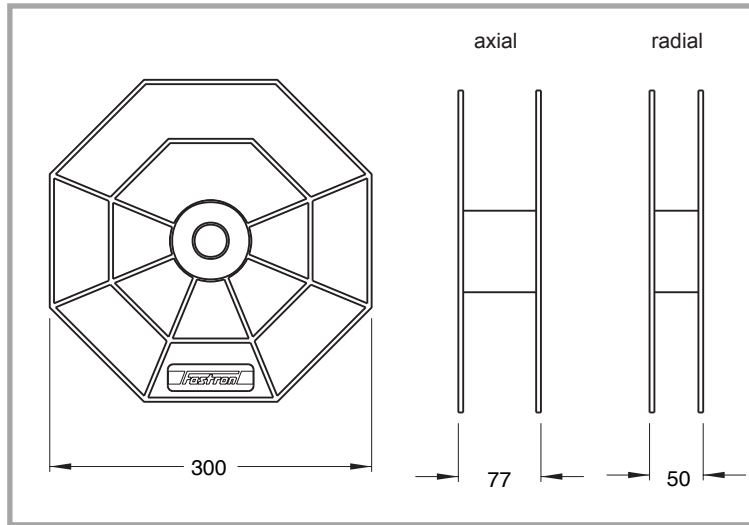


Fig. 2: Axial, loose form  
Packing code : 00

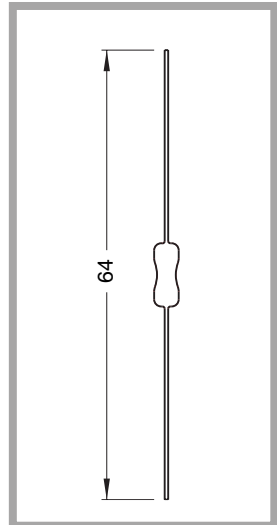


Fig. 3 : Axial preformed  
Packing code : 20

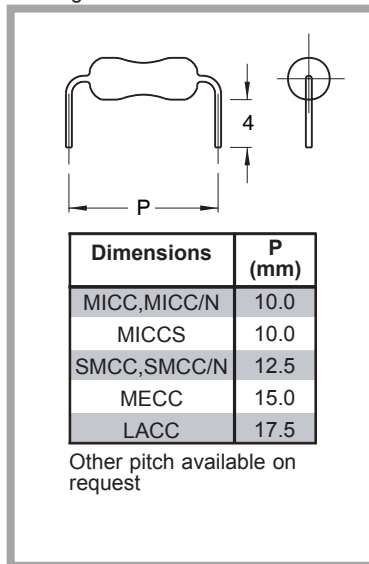


Fig. 4: Axial Standard Taping (65mm)  
Packing code : 01, 02

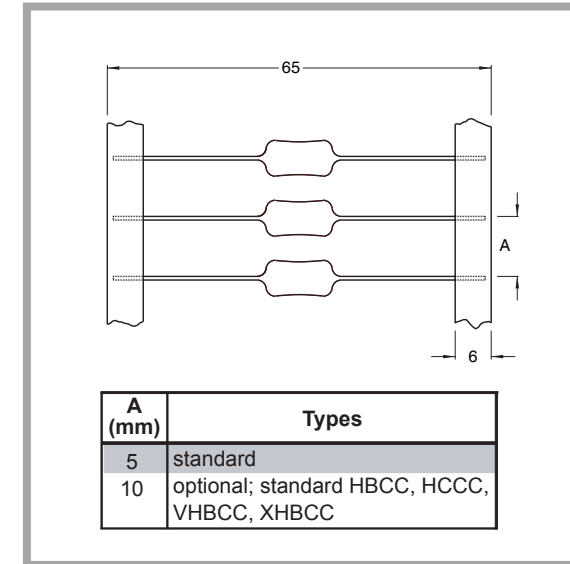


Fig. 5: Axial Narrow Taping (38mm)  
Packing code : 11, 12

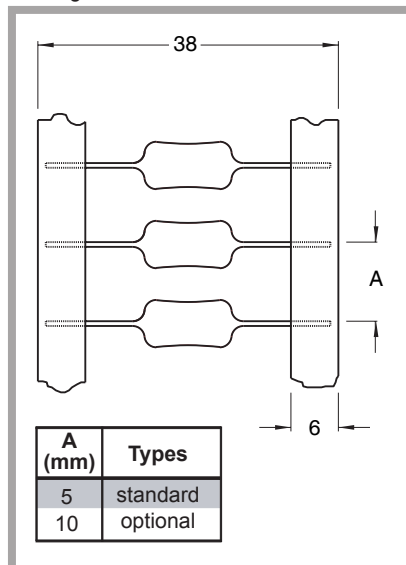
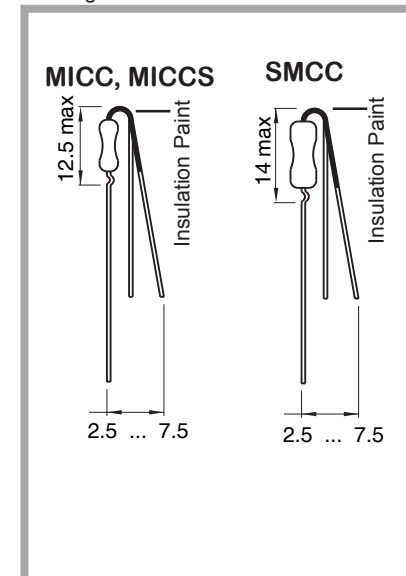


Fig. 6: Radial, (with kink) loose form  
Packing code : 40

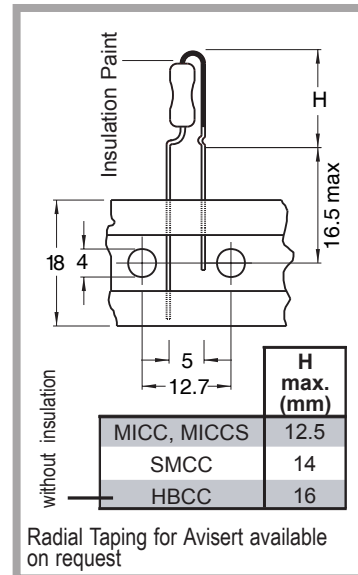




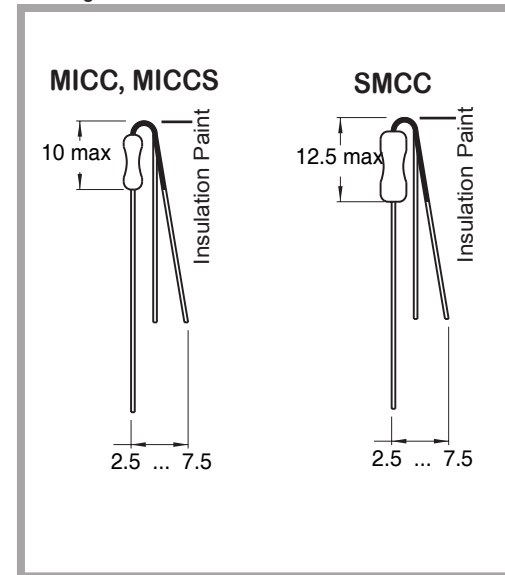


**Packing Specification**

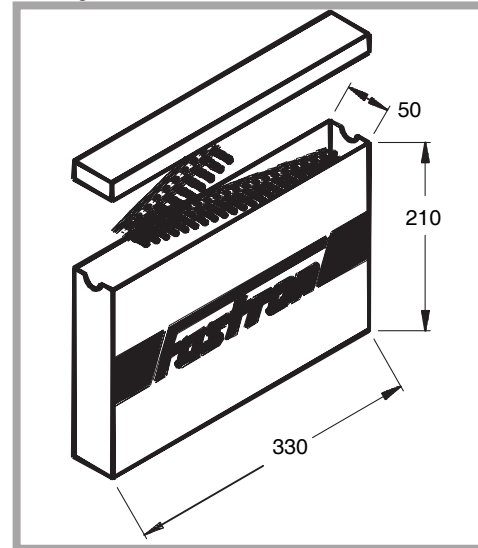
**Fig. 7: Radial Taping**  
Packing code : 31, 32



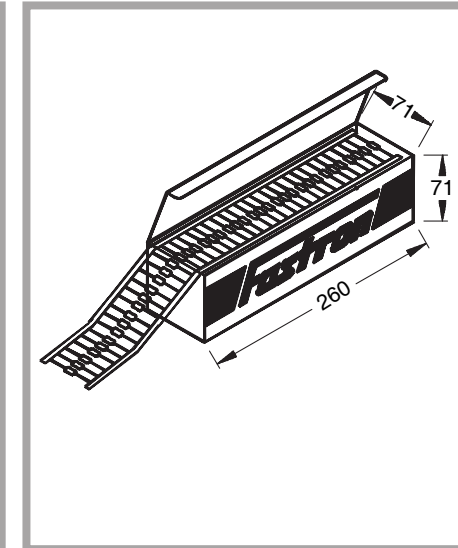
**Fig. 8 : Radial, (without kink) loose form**  
Packing code : 50



**Fig. 9 : Ammopack, radial**  
Packing code : 32



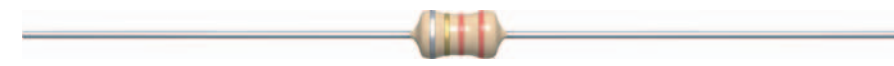
**Fig. 10 : Ammopack, axial**  
Packing code : 02



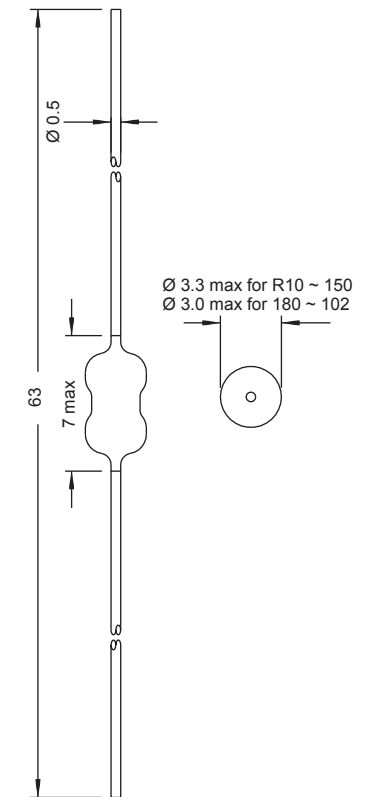
All dimensions in mm

Packing Specification

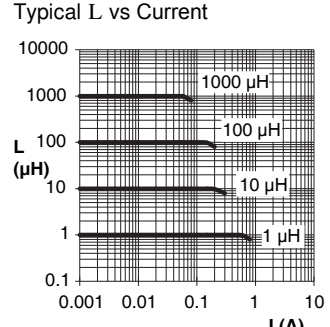
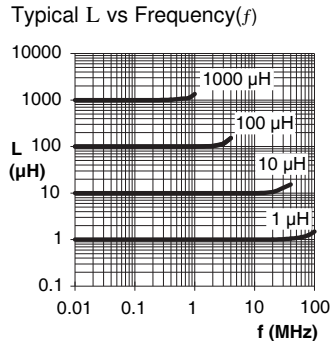
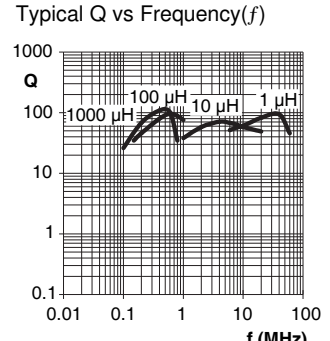
**MICC, MICC/N**



All dimensions in mm



Part No	Inductance L (μH)	MICC fL (MHz)	MICC/N fL (MHz)	Tol ± (%)	Q min	f <sub>0</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)	Material
MICC-R10X-YY	0.1	1	25.2	10,20	35	25.2	600	0.11	1.1	Phenolic
MICC-R11X-YY	0.11	1	25.2	10,20	35	25.2	570	0.12	1.1	Phenolic
MICC-R12X-YY	0.12	1	25.2	10,20	35	25.2	570	0.12	1.08	Phenolic
MICC-R15X-YY	0.15	1	25.2	10,20	35	25.2	500	0.13	1.02	Phenolic
MICC-R18X-YY	0.18	1	25.2	10,20	35	25.2	460	0.14	1	Phenolic
MICC-R20X-YY	0.2	1	25.2	10,20	35	25.2	420	0.16	0.99	Phenolic
MICC-R22X-YY	0.22	1	25.2	10,20	35	25.2	420	0.16	0.99	Phenolic
MICC-R27X-YY	0.27	1	25.2	10,20	35	25.2	380	0.17	0.91	Phenolic
MICC-R33X-YY	0.33	1	25.2	10,20	35	25.2	330	0.2	0.83	Phenolic
MICC-R39X-YY	0.39	1	25.2	10,20	35	25.2	300	0.22	0.79	Phenolic
MICC-R47X-YY	0.47	1	25.2	10,20	35	25.2	280	0.25	0.75	Phenolic
MICC-R56X-YY	0.56	1	25.2	10,20	35	25.2	260	0.28	0.7	Phenolic
MICC-R68X-YY	0.68	1	25.2	10,20	35	25.2	240	0.48	0.53	Phenolic
MICC-R82X-YY	0.82	1	25.2	10,20	35	25.2	230	0.55	0.5	Phenolic
MICC-1R0X-YY	1	1	25.2	5,10,20	35	25.2	180	0.25	0.63	Ferrite
MICC-1R2X-YY	1.2	1	7.96	5,10,20	40	7.96	170	0.25	0.61	Ferrite
MICC-1R3X-YY	1.3	1	7.96	5,10,20	40	7.96	170	0.25	0.61	Ferrite
MICC-1R5X-YY	1.5	1	7.96	5,10,20	40	7.96	150	0.3	0.57	Ferrite
MICC-1R8X-YY	1.8	1	7.96	5,10,20	40	7.96	130	0.3	0.54	Ferrite
MICC-2R2X-YY	2.2	1	7.96	5,10,20	40	7.96	120	0.35	0.52	Ferrite
MICC-2R4X-YY	2.4	1	7.96	5,10,20	40	7.96	110	0.4	0.48	Ferrite
MICC-2R7X-YY	2.7	1	7.96	5,10,20	40	7.96	110	0.4	0.48	Ferrite
MICC-3R3X-YY	3.3	1	7.96	5,10,20	40	7.96	110	0.5	0.42	Ferrite
MICC-3R9X-YY	3.9	1	7.96	5,10,20	40	7.96	100	0.55	0.4	Ferrite
MICC-4R0X-YY	4	1	7.96	5,10,20	40	7.96	90	0.65	0.38	Ferrite
MICC-4R4X-YY	4.4	1	7.96	5,10,20	40	7.96	90	0.65	0.38	Ferrite
MICC-4R7X-YY	4.7	1	7.96	5,10,20	40	7.96	90	0.65	0.38	Ferrite
MICC-4R9X-YY	4.9	1	7.96	5,10,20	40	7.96	90	0.65	0.38	Ferrite
MICC-5R0X-YY	5	1	7.96	5,10,20	45	7.96	75	1.3	0.26	Ferrite
MICC-5R6X-YY	5.6	1	7.96	5,10,20	45	7.96	75	1.3	0.26	Ferrite
MICC-6R2X-YY	6.2	1	7.96	5,10,20	45	7.96	70	1.45	0.25	Ferrite
MICC-6R8X-YY	6.8	1	7.96	5,10,20	45	7.96	70	1.45	0.25	Ferrite
MICC-8R2X-YY	8.2	1	7.96	5,10,20	50	7.96	65	1.6	0.24	Ferrite
MICC-100X-YY	10	1	7.96	5,10,20	50	7.96	60	1.7	0.23	Ferrite
MICC-120X-YY	12	0.02	2.52	5,10,20	50	2.52	50	2.4	0.19	Ferrite
MICC-150X-YY	15	0.02	2.52	5,10,20	50	2.52	45	2.7	0.185	Ferrite
MICC-180X-YY	18	0.02	2.52	5,10,20	60	2.52	14	0.81	0.35	Ferrite
MICC-220X-YY	22	0.02	2.52	5,10,20	60	2.52	12	0.9	0.335	Ferrite
MICC-270X-YY	27	0.02	2.52	5,10,20	60	2.52	11	1	0.315	Ferrite
MICC-330X-YY	33	0.02	2.52	5,10,20	60	2.52	10	1.12	0.3	Ferrite
MICC-390X-YY	39	0.02	2.52	5,10,20	60	2.52	8.5	1.21	0.285	Ferrite
MICC-470X-YY	47	0.02	2.52	5,10,20	60	2.52	7.7	2.4	0.2	Ferrite
MICC-560X-YY	56	0.02	2.52	5,10,20	60	2.52	6.8	2.6	0.195	Ferrite
MICC-620X-YY	62	0.02	2.52	5,10,20	60	2.52	5.7	2.9	0.185	Ferrite
MICC-680X-YY	68	0.02	2.52	5,10,20	60	2.52	5.7	2.9	0.185	Ferrite
MICC-820X-YY	82	0.02	2.52	5,10,20	60	2.52	5.5	3.2	0.175	Ferrite
MICC-101X-YY	100	0.02	2.52	5,10,20	60	2.52	5.3	3.5	0.17	Ferrite
MICC-121X-YY	120	0.02	0.79	5,10,20	60	0.79	5	3.8	0.16	Ferrite
MICC-151X-YY	150	0.02	0.79	5,10,20	60	0.79	4.6	4.3	0.15	Ferrite
MICC-181X-YY	180	0.02	0.79	5,10,20	60	0.79	4.2	5.3	0.135	Ferrite
MICC-221X-YY	220	0.02	0.79	5,10,20	60	0.79	3.8	5.8	0.13	Ferrite
MICC-271X-YY	270	0.02	0.79	5,10,20	60	0.79	3.2	7.8	0.115	Ferrite
MICC-281X-YY	280	0.02	0.79	5,10,20	60	0.79	3.2	7.8	0.115	Ferrite
MICC-331X-YY	330	0.02	0.79	5,10,20	60	0.79	3	8.7	0.105	Ferrite
MICC-351X-YY	350	0.02	0.79	5,10,20	60	0.79	2.7	8.7	0.105	Ferrite
MICC-391X-YY	390	0.02	0.79	5,10,20	60	0.79	2.7	11	0.095	Ferrite
MICC-471X-YY	470	0.02	0.79	5,10,20	60	0.79	2.3	12	0.09	Ferrite
MICC-561X-YY	560	0.02	0.79	5,10,20	60	0.79	2.2	16.5	0.075	Ferrite
MICC-681X-YY	680	0.02	0.79	5,10,20	60	0.79	2	22	0.065	Ferrite
MICC-821X-YY	820	0.02	0.79	5,10,20	60	0.79	1.8	25	0.06	Ferrite
MICC-102X-YY	1000	0.02	0.79	5,10,20	60	0.79	1.5	33	0.055	Ferrite



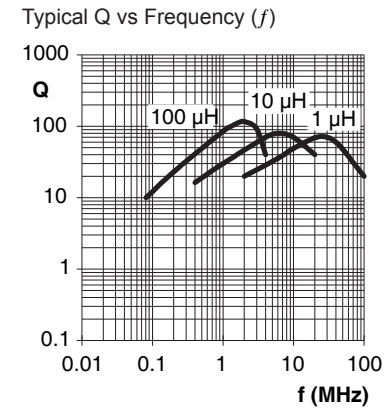
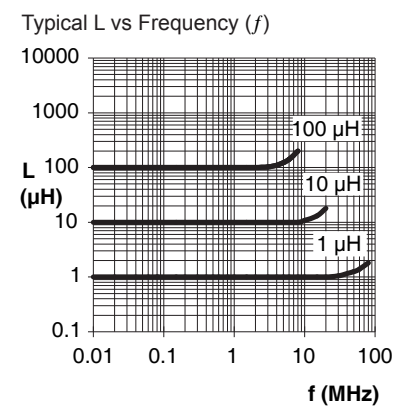
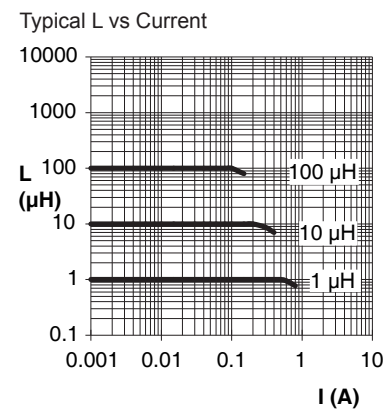
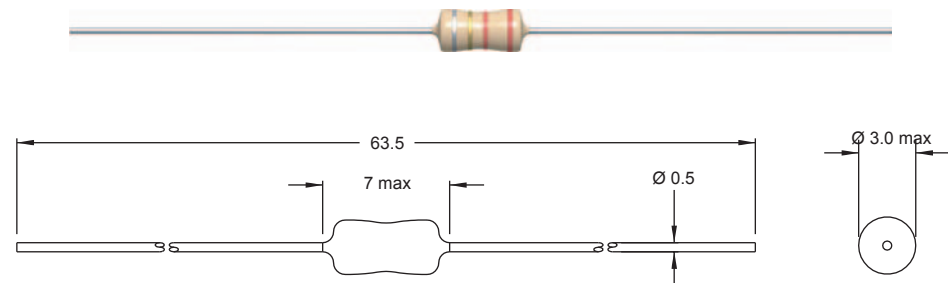
SPQ :

Packing Form	Loose / Box	Reel	Taped / Ammopack
Axial	4000 [-00]	4000 [-01]	1500 [-02]
Preformed	8000 [-20]		
Radial	4000 [-50]	2000 [-31]	3500 [-32]

Remark: Difference of MICC and MICC/N is that for MICC/N fL = fQ



# MICCS, MICCS/N



All dimensions in mm

Leaded Inductors

	Part No	Inductance L (μH)	MICCS MICCS/N		Tol ± (%)	Q min	f <sub>α</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
			f <sub>L</sub> (MHz)	f <sub>L</sub> (MHz)						
Single layer	MICCS-1R0X-YY	1	1	7.96	5,10,20	40	7.96	180	0.19	725
	MICCS-1R2X-YY	1.2	1	7.96	5,10,20	40	7.96	160	0.2	700
	MICCS-1R5X-YY	1.5	1	7.96	5,10,20	40	7.96	155	0.22	670
	MICCS-1R8X-YY	1.8	1	7.96	5,10,20	45	7.96	145	0.23	660
	MICCS-2R2X-YY	2.2	1	7.96	5,10,20	45	7.96	130	0.25	630
	MICCS-2R7X-YY	2.7	1	7.96	5,10,20	45	7.96	110	0.27	610
	MICCS-3R3X-YY	3.3	1	7.96	5,10,20	50	7.96	90	0.3	580
	MICCS-3R9X-YY	3.9	1	7.96	5,10,20	50	7.96	70	0.32	560
	MICCS-4R7X-YY	4.7	1	7.96	5,10,20	50	7.96	60	0.36	530
	MICCS-5R6X-YY	5.6	1	7.96	5,10,20	50	7.96	50	0.38	510
	MICCS-6R8X-YY	6.8	1	7.96	5,10,20	50	7.96	40	0.43	480
	MICCS-8R2X-YY	8.2	1	7.96	5,10,20	50	7.96	30	0.52	450
	MICCS-100X-YY	10	1	2.52	5,10,20	55	2.52	25	0.6	410
	MICCS-120X-YY	12	0.02	2.52	5,10,20	55	2.52	20	0.67	385
	MICCS-150X-YY	15	0.02	2.52	5,10,20	60	2.52	17	0.74	365
MICCS-180X-YY	18	0.02	2.52	5,10,20	60	2.52	40	2.9	205	
Multi layer	MICCS-220X-YY	22	0.02	2.52	5,10,20	60	2.52	30	3	200
	MICCS-270X-YY	27	0.02	2.52	5,10,20	60	2.52	26	3.1	195
	MICCS-330X-YY	33	0.02	2.52	5,10,20	60	2.52	24	3.3	190
	MICCS-390X-YY	39	0.02	2.52	5,10,20	60	2.52	22	3.5	185
	MICCS-470X-YY	47	0.02	2.52	5,10,20	60	2.52	20	4	165
	MICCS-560X-YY	56	0.02	2.52	5,10,20	60	2.52	18	5.2	150
	MICCS-680X-YY	68	0.02	2.52	5,10,20	60	2.52	15	5.8	140
	MICCS-820X-YY	82	0.02	2.52	5,10,20	60	2.52	14	6.4	135
	MICCS-860X-YY	86	0.02	2.52	5,10,20	60	2.52	13	6.4	130
	MICCS-101X-YY	100	0.02	2.52	5,10,20	60	2.52	13	7	130
	MICCS-121X-YY	120	0.02	0.79	5,10,20	60	0.79	11	10.6	125
	MICCS-151X-YY	150	0.02	0.79	5,10,20	60	0.79	9	13.5	120
	MICCS-181X-YY	180	0.02	0.79	5,10,20	60	0.79	8.5	15	115
	MICCS-221X-YY	220	0.02	0.79	5,10,20	60	0.79	8	16.2	110
	MICCS-331X-YY	330	0.02	0.79	5,10,20	30	0.79	5	28	105

Material : Ferrite

SPQ :	Packing Form	Loose / Box	Reel	Taped / Ammopack
	Axial	4000 [-00]	4000 [-01]	1500 [-02]
	Preformed	8000 [-20]		
	Radial	4000 [-50]	2000 [-31]	3500 [-32]

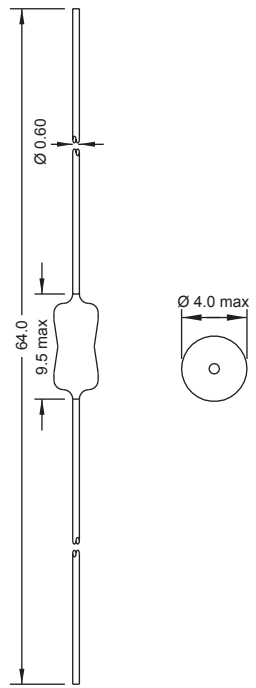
Remark: Difference of MICCS and MICCS/N is that for MICCS/N f<sub>L</sub> = f<sub>Q</sub>

# SMCC, SMCC/N



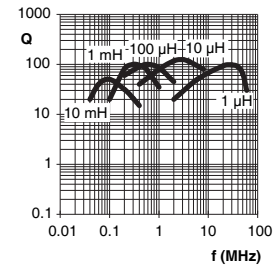
Similar to moulded CCSS, page 30

All dimensions in mm

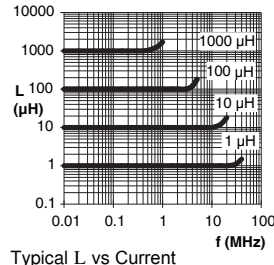


Leaded Inductors

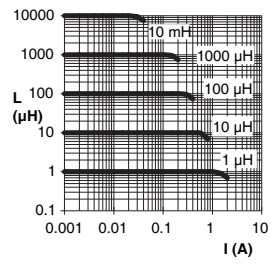
Typical Q vs Frequency(f)



Typical L vs Frequency(f)



Typical L vs Current



**SPQ :**

Packing Form	Loose / Box
Axial	2000 [-00]
Preformed	6000 [-20]
Radial	2000 [-50]

	Reel
Axial	3500 [-01]
Radial	1500 [-31]

	Taped / Ammopack
Axial	1200 [-02]
Radial	2500 [-32]

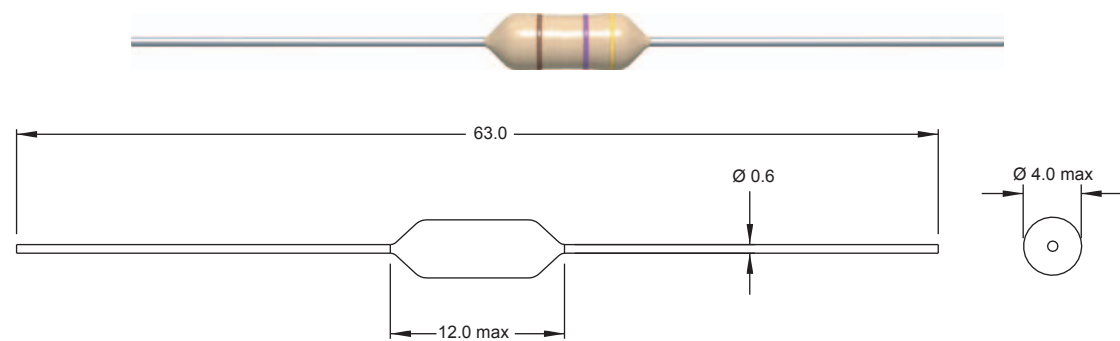
**Remark:** Difference of SMCC and SMCC/N is that for SMCC/N  $f_L = f_Q$

Part No	Inductance L (μH)	SMCC f <sub>L</sub> (MHz)	SMCC/N f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)	Material
SMCC-R10X-YY	0.1	1	25.2	10,20	45	25.2	380	0.08	1600	Phenolic
SMCC-R12X-YY	0.12	1	25.2	10,20	45	25.2	360	0.1	1550	Phenolic
SMCC-R15X-YY	0.15	1	25.2	10,20	45	25.2	340	0.1	1500	Phenolic
SMCC-R18X-YY	0.18	1	25.2	10,20	45	25.2	320	0.1	1480	Phenolic
SMCC-R22X-YY	0.22	1	25.2	10,20	45	25.2	300	0.1	1450	Phenolic
SMCC-R27X-YY	0.27	1	25.2	10,20	45	25.2	270	0.11	1400	Phenolic
SMCC-R33X-YY	0.33	1	25.2	10,20	45	25.2	250	0.12	1350	Phenolic
SMCC-R39X-YY	0.39	1	25.2	10,20	45	25.2	230	0.13	1300	Phenolic
SMCC-R47X-YY	0.47	1	25.2	10,20	45	25.2	220	0.14	1280	Phenolic
SMCC-R56X-YY	0.56	1	25.2	10,20	45	25.2	210	0.15	1240	Phenolic
SMCC-R68X-YY	0.68	1	25.2	10,20	45	25.2	200	0.16	1230	Phenolic
SMCC-R82X-YY	0.82	1	25.2	10,20	45	25.2	190	0.17	1210	Phenolic
SMCC-1R0X-YY	1	1	25.2	5,10,20	45	25.2	205	0.16	1200	Ferrite
SMCC-1R2X-YY	1.2	1	7.96	5,10,20	50	7.96	185	0.18	1150	Ferrite
SMCC-1R5X-YY	1.5	1	7.96	5,10,20	50	7.96	165	0.2	1100	Ferrite
SMCC-1R8X-YY	1.8	1	7.96	5,10,20	55	7.96	155	0.22	1030	Ferrite
SMCC-2R2X-YY	2.2	1	7.96	5,10,20	55	7.96	140	0.25	1000	Ferrite
SMCC-2R7X-YY	2.7	1	7.96	5,10,20	60	7.96	125	0.26	940	Ferrite
SMCC-3R3X-YY	3.3	1	7.96	5,10,20	60	7.96	115	0.29	900	Ferrite
SMCC-3R9X-YY	3.9	1	7.96	5,10,20	60	7.96	105	0.31	850	Ferrite
SMCC-4R7X-YY	4.7	1	7.96	5,10,20	60	7.96	95	0.34	820	Ferrite
SMCC-5R6X-YY	5.6	1	7.96	5,10,20	60	7.96	85	0.38	780	Ferrite
SMCC-6R2X-YY	6.2	1	7.96	5,10,20	65	7.96	75	0.61	670	Ferrite
SMCC-6R8X-YY	6.8	1	7.96	5,10,20	65	7.96	75	0.51	670	Ferrite
SMCC-8R2X-YY	8.2	1	7.96	5,10,20	65	7.96	50	0.48	690	Ferrite
SMCC-100X-YY	10	1	7.96	5,10,20	65	7.96	35	0.49	680	Ferrite
SMCC-120X-YY	12	0.02	2.52	5,10,20	50	2.52	30	0.55	650	Ferrite
SMCC-150X-YY	15	0.02	2.52	5,10,20	50	2.52	20	0.6	610	Ferrite
SMCC-180X-YY	18	0.02	2.52	5,10,20	50	2.52	17	0.67	580	Ferrite
SMCC-200X-YY	20	0.02	2.52	5,10,20	50	2.52	13	0.74	560	Ferrite
SMCC-220X-YY	22	0.02	2.52	5,10,20	50	2.52	13	0.74	560	Ferrite
SMCC-270X-YY	27	0.02	2.52	5,10,20	55	2.52	10	0.83	530	Ferrite
SMCC-300X-YY	30	0.02	2.52	5,10,20	55	2.52	9	0.92	500	Ferrite
SMCC-330X-YY	33	0.02	2.52	5,10,20	55	2.52	9	0.92	500	Ferrite
SMCC-390X-YY	39	0.02	2.52	5,10,20	55	2.52	8	1.02	470	Ferrite
SMCC-470X-YY	47	0.02	2.52	5,10,20	40	2.52	7.5	1.1	450	Ferrite
SMCC-560X-YY	56	0.02	2.52	5,10,20	40	2.52	7	1.23	430	Ferrite
SMCC-680X-YY	68	0.02	2.52	5,10,20	40	2.52	6.5	1.35	410	Ferrite
SMCC-820X-YY	82	0.02	2.52	5,10,20	35	2.52	6	1.54	390	Ferrite
SMCC-101X-YY	100	0.02	2.52	5,10,20	30	2.52	5	1.7	370	Ferrite
SMCC-121X-YY	120	0.02	0.79	5,10,20	70	0.79	4.5	2.4	300	Ferrite
SMCC-131X-YY	130	0.02	0.79	5,10,20	70	0.79	4.2	2.8	280	Ferrite
SMCC-151X-YY	150	0.02	0.79	5,10,20	70	0.79	4.2	2.8	280	Ferrite
SMCC-161X-YY	160	0.02	0.79	5,10,20	70	0.79	3.9	3	270	Ferrite
SMCC-181X-YY	180	0.02	0.79	5,10,20	70	0.79	3.9	3	270	Ferrite
SMCC-201X-YY	200	0.02	0.79	5,10,20	70	0.79	3.7	3.3	250	Ferrite
SMCC-221X-YY	220	0.02	0.79	5,10,20	70	0.79	3.7	3.3	250	Ferrite
SMCC-271X-YY	270	0.02	0.79	5,10,20	70	0.79	2.8	5.7	200	Ferrite
SMCC-281X-YY	280	0.02	0.79	5,10,20	70	0.79	2.8	5.7	190	Ferrite
SMCC-331X-YY	330	0.02	0.79	5,10,20	70	0.79	2.7	6.4	190	Ferrite
SMCC-351X-YY	350	0.02	0.79	5,10,20	70	0.79	2.4	6.4	180	Ferrite
SMCC-391X-YY	390	0.02	0.79	5,10,20	70	0.79	2.4	7	180	Ferrite
SMCC-471X-YY	470	0.02	0.79	5,10,20	70	0.79	2.2	7.9	170	Ferrite
SMCC-561X-YY	560	0.02	0.79	5,10,20	60	0.79	2	8.8	160	Ferrite
SMCC-681X-YY	680	0.02	0.79	5,10,20	55	0.79	1.9	10	150	Ferrite
SMCC-821X-YY	820	0.02	0.79	5,10,20	55	0.79	1.6	12	140	Ferrite
SMCC-102X-YY	1000	0.02	0.79	5,10,20	50	0.79	1.6	14	130	Ferrite
SMCC-122X-YY	1200	0.02	0.25	5,10,20	50	0.25	1.3	16.9	120	Ferrite
SMCC-152X-YY	1500	0.02	0.25	5,10,20	40	0.25	1.25	21.6	100	Ferrite
SMCC-182X-YY	1800	0.02	0.25	5,10,20	40	0.25	1.2	24	95	Ferrite
SMCC-222X-YY	2200	0.02	0.25	5,10,20	40	0.25	1.1	34.7	80	Ferrite
SMCC-272X-YY	2700	0.02	0.25	5,10,20	40	0.25	1	40	75	Ferrite
SMCC-332X-YY	3300	0.02	0.25	5,10,20	40	0.25	0.9	59.5	62	Ferrite
SMCC-352X-YY	3500	0.02	0.25	5,10,20	40	0.25	0.7	59.5	59	Ferrite
SMCC-392X-YY	3900	0.02	0.25	5,10,20	40	0.25	0.8	66	59	Ferrite
SMCC-472X-YY	4700	0.02	0.25	5,10,20	40	0.25	0.7	74	55	Ferrite
SMCC-502X-YY	5000	0.02	0.25	5,10,20	30	0.25	0.55	70	40	Ferrite
SMCC-562X-YY	5600	0.02	0.25	5,10,20	30	0.25	0.55	70	40	Ferrite
SMCC-682X-YY	6800	0.02	0.25	5,10,20	30	0.25	0.5	90	35	Ferrite
SMCC-822X-YY	8200	0.02	0.25	5,10,20	30	0.25	0.4	95	30	Ferrite
SMCC-103X-YY	10000	0.02	0.25	5,10,20	20	0.25	0.35	115	25	Ferrite

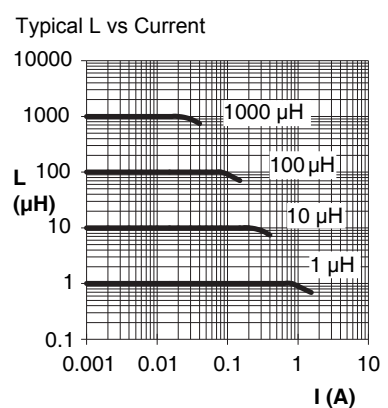
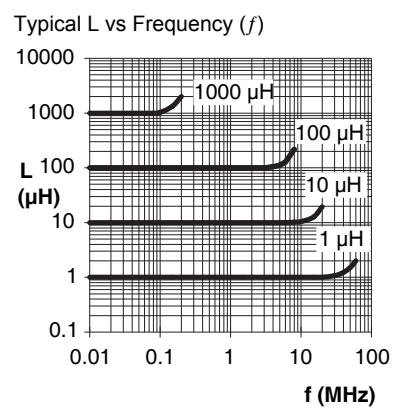
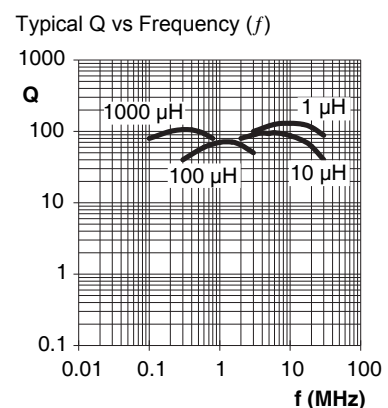




(shielded) **MSMCC**



Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
MSMCC-1R0M-YY	1	1	20	47	25.2	140	0.07	1900
MSMCC-1R2M-YY	1.2	1	20	46	7.96	130	0.09	1600
MSMCC-1R5M-YY	1.5	1	20	45	7.96	115	0.1	1300
MSMCC-1R8M-YY	1.8	1	20	43	7.96	105	0.12	1200
MSMCC-2R2M-YY	2.2	1	20	45	7.96	100	0.15	1100
MSMCC-2R7M-YY	2.7	1	20	46	7.96	92	0.2	950
MSMCC-3R3M-YY	3.3	1	20	44	7.96	85	0.23	800
MSMCC-3R9M-YY	3.9	1	20	44	7.96	75	0.27	750
MSMCC-4R7M-YY	4.7	1	20	44	7.96	70	0.32	650
MSMCC-5R6M-YY	5.6	1	20	47	7.96	65	0.35	550
MSMCC-6R8M-YY	6.8	1	20	50	7.96	55	0.4	500
MSMCC-8R2M-YY	8.2	1	20	50	7.96	50	0.5	475
MSMCC-100M-YY	10	1	20	49	7.96	46	0.6	450
MSMCC-120M-YY	12	0.02	20	55	2.52	44	0.9	400
MSMCC-150M-YY	15	0.02	20	44	2.52	49	0.8	620
MSMCC-180M-YY	18	0.02	20	45	2.52	45	0.89	610
MSMCC-220M-YY	22	0.02	20	46	2.52	41	0.96	600
MSMCC-270M-YY	27	0.02	20	49	2.52	38	1.19	500
MSMCC-330M-YY	33	0.02	20	45	2.52	34	1.37	490
MSMCC-390M-YY	39	0.02	20	53	2.52	29	1.93	410
MSMCC-470M-YY	47	0.02	20	52	2.52	27	2.11	400
MSMCC-560M-YY	56	0.02	20	49	2.52	25	2.23	380
MSMCC-680M-YY	68	0.02	20	51	2.52	21	2.7	370
MSMCC-820M-YY	82	0.02	20	45	2.52	10.5	1.9	360
MSMCC-101M-YY	100	0.02	20	52	2.52	10	2	320
MSMCC-121M-YY	120	0.02	20	57	0.796	9.7	2.1	290
MSMCC-151M-YY	150	0.02	20	56	0.796	8.5	2.3	275
MSMCC-181M-YY	180	0.02	20	60	0.796	8	2.5	260
MSMCC-221M-YY	220	0.02	20	58	0.796	7.5	2.7	250
MSMCC-271M-YY	270	0.02	20	60	0.796	7	3	240
MSMCC-331M-YY	330	0.02	20	54	0.796	6.5	3.5	225
MSMCC-391M-YY	390	0.02	20	67	0.796	6.2	4	200
MSMCC-471M-YY	470	0.02	20	60	0.796	5.7	4.5	180
MSMCC-561M-YY	560	0.02	20	60	0.796	4.7	5.5	174
MSMCC-681M-YY	680	0.02	20	60	0.796	4.5	7	168
MSMCC-821M-YY	820	0.02	20	57	0.796	4.2	7.5	152
MSMCC-102M-YY	1000	0.02	20	65	0.796	3.8	8	135
MSMCC-122M-YY	1200	0.02	20	45	0.252	2.3	12	115
MSMCC-152M-YY	1500	0.02	20	49	0.252	2.1	13	110
MSMCC-182M-YY	1800	0.02	20	47	0.252	1.9	14	105
MSMCC-222M-YY	2200	0.02	20	40	0.252	1.7	15	99
MSMCC-272M-YY	2700	0.02	20	47	0.252	1.5	25	83
MSMCC-332M-YY	3300	0.02	20	43	0.252	1.3	30	80
MSMCC-392M-YY	3900	0.02	20	43	0.252	1.2	35	67
MSMCC-472M-YY	4700	0.02	20	44	0.252	1.1	40	63
MSMCC-103M-YY	10000	0.02	20	30	0.0796	0.20	90	0.04



All dimensions in mm

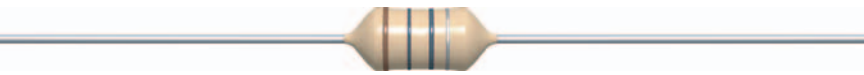
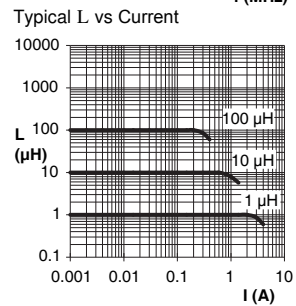
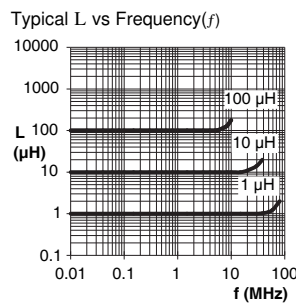
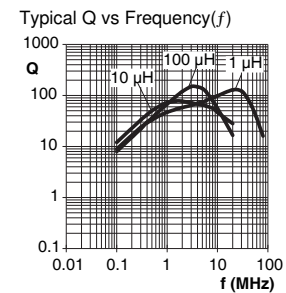
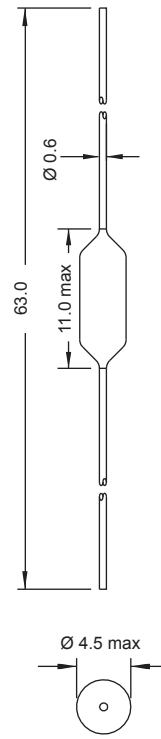
Leaded Inductors

Material : Ferrite

SPQ :	Packing Form	Loose / Box	Reel	Taped / Ampopack
	Axial	1000 [-00]	3000 [-01]	1000 [-02]
	Preformed	1500 [-20]		



# MECC



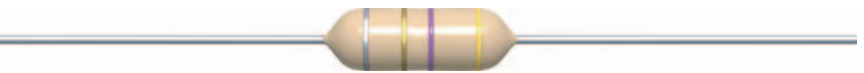
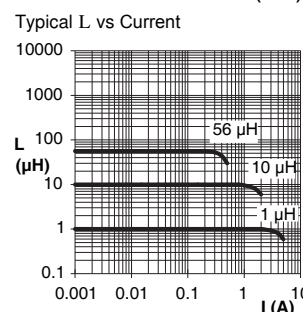
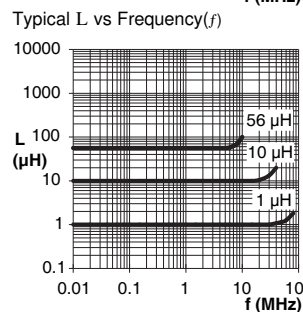
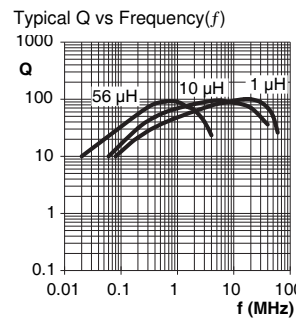
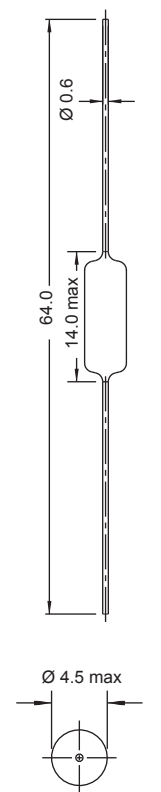
Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)
MECC-1R0X-YY	1	1	10,20	60	7.96	180	0.13	1.8
MECC-1R2X-YY	1.2	1	10,20	60	7.96	165	0.14	1.75
MECC-1R5X-YY	1.5	1	10,20	60	7.96	148	0.16	1.4
MECC-1R8X-YY	1.8	1	10,20	50	7.96	140	0.18	1.3
MECC-2R2X-YY	2.2	1	10,20	50	7.96	122	0.2	1.25
MECC-2R7X-YY	2.7	1	10,20	50	7.96	112	0.24	1.1
MECC-3R3X-YY	3.3	1	10,20	50	7.96	104	0.28	0.95
MECC-3R9X-YY	3.9	1	10,20	50	7.96	95	0.35	0.9
MECC-4R7X-YY	4.7	1	10,20	50	7.96	90	0.39	0.625
MECC-5R6X-YY	5.6	1	10,20	45	7.96	84	0.42	0.6
MECC-6R8X-YY	6.8	1	10,20	45	7.96	76	0.48	0.575
MECC-8R2X-YY	8.2	1	10,20	45	7.96	72	0.6	0.55
MECC-100X-YY	10	1	10,20	45	7.96	63	0.96	0.525
MECC-120X-YY	12	0.02	10,20	45	2.52	57	1.02	0.515
MECC-150X-YY	15	0.02	10,20	45	2.52	54	1.2	0.5
MECC-180X-YY	18	0.02	10,20	45	2.52	50	1.32	0.45
MECC-220X-YY	22	0.02	10,20	50	2.52	45	1.9	0.425
MECC-270X-YY	27	0.02	10,20	60	2.52	41	2.2	0.4
MECC-330X-YY	33	0.02	10,20	60	2.52	37	3	0.36
MECC-390X-YY	39	0.02	10,20	60	2.52	35	3.4	0.3
MECC-470X-YY	47	0.02	10,20	60	2.52	33	4.5	0.27
MECC-560X-YY	56	0.02	10,20	60	2.52	32	4.7	0.25
MECC-680X-YY	68	0.02	10,20	70	2.52	28	6	0.22
MECC-820X-YY	82	0.02	10,20	70	2.52	26	7.8	0.18
MECC-101X-YY	100	0.02	10,20	70	2.52	23	14	0.14
MECC-121X-YY	120	0.02	10,20	30	0.79	21	16	0.11
MECC-151X-YY	150	0.02	10,20	30	0.79	20	18	0.09

Material : Ferrite

SPQ :

Packing Form	Loose / Box	Reel	Taped / Ammopack
Axial	2000 [-00]	3000 [-01]	1200 [-02]
Preformed	1500 [-20]		

# LACC



Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)
LACC-1R0X-YY	1	1	10,20	60	25.2	175	0.09	2
LACC-1R2X-YY	1.2	1	10,20	60	7.96	157	0.1	1.95
LACC-1R5X-YY	1.5	1	10,20	60	7.96	144	0.11	1.9
LACC-1R8X-YY	1.8	1	10,20	60	7.96	135	0.12	1.85
LACC-2R2X-YY	2.2	1	10,20	60	7.96	121	0.15	1.7
LACC-2R7X-YY	2.7	1	10,20	60	7.96	113	0.15	1.65
LACC-3R3X-YY	3.3	1	10,20	60	7.96	103	0.23	1.1
LACC-3R9X-YY	3.9	1	10,20	60	7.96	96	0.3	1.05
LACC-4R7X-YY	4.7	1	10,20	60	7.96	89	0.33	1
LACC-5R6X-YY	5.6	1	10,20	60	7.96	85	0.37	0.9
LACC-6R8X-YY	6.8	1	10,20	50	7.96	72	0.45	0.875
LACC-8R2X-YY	8.2	1	10,20	50	7.96	66	0.63	0.84
LACC-100X-YY	10	1	10,20	50	7.96	57	0.73	0.8
LACC-120X-YY	12	0.02	10,20	50	2.52	51	1.35	0.65
LACC-150X-YY	15	0.02	10,20	60	2.52	47	1.5	0.61
LACC-180X-YY	18	0.02	10,20	60	2.52	44	1.65	0.565
LACC-220X-YY	22	0.02	10,20	60	2.52	41	1.86	0.51
LACC-270X-YY	27	0.02	10,20	60	2.52	38	2.1	0.49
LACC-330X-YY	33	0.02	10,20	60	2.52	36	2.4	0.45
LACC-390X-YY	39	0.02	10,20	55	2.52	33	2.7	0.43
LACC-470X-YY	47	0.02	10,20	55	2.52	31	3	0.39
LACC-560X-YY	56	0.02	10,20	55	2.52	29	3.4	0.36

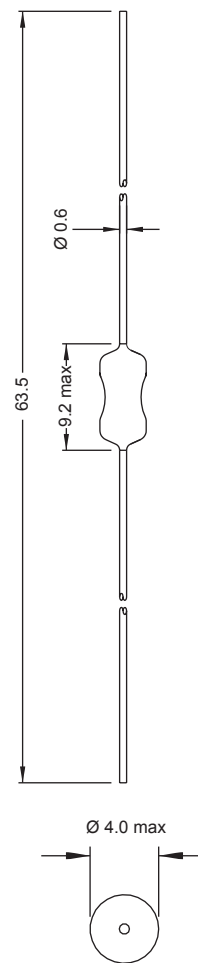
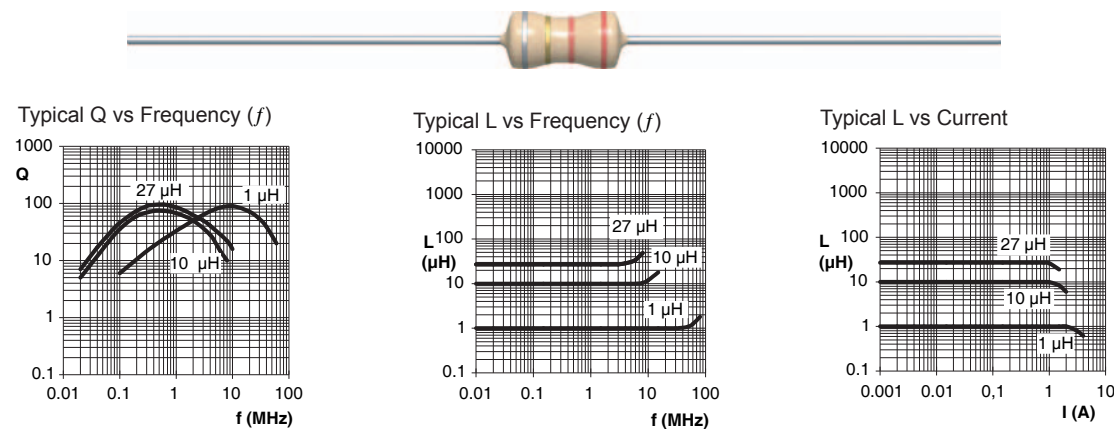
Material : Ferrite

SPQ :

Packing Form	Loose / Box	Reel	Taped / Ammopack
Axial	2000 [-00]	3000 [-01]	1000 [-02]
Preformed	1500 [-20]		



## HACC



All dimensions in mm

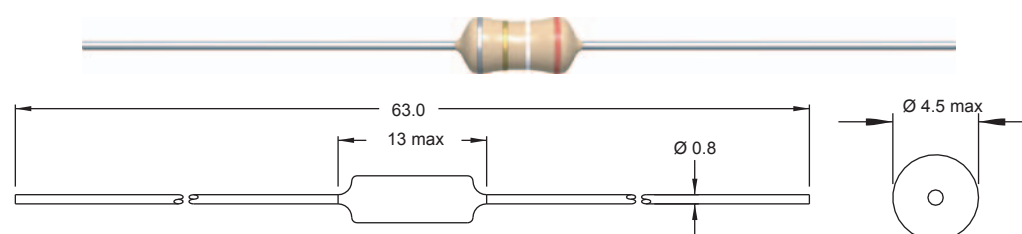
Leaded Inductors

Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)
HACC-1R0X-YY	1	1	10,20	50	7.96	195	0.08	2
HACC-1R2X-YY	1.2	1	10,20	50	7.96	180	0.09	1.8
HACC-1R5X-YY	1.5	1	10,20	50	7.96	165	0.1	1.7
HACC-1R8X-YY	1.8	1	10,20	50	7.96	155	0.11	1.65
HACC-2R2X-YY	2.2	1	10,20	50	7.96	140	0.12	1.6
HACC-2R7X-YY	2.7	1	10,20	50	7.96	125	0.13	1.5
HACC-3R3X-YY	3.3	1	10,20	50	7.96	115	0.14	1.45
HACC-3R9X-YY	3.9	1	10,20	50	7.96	105	0.15	1.4
HACC-4R7X-YY	4.7	1	10,20	50	7.96	60	0.17	1.3
HACC-5R6X-YY	5.6	1	10,20	50	7.96	45	0.19	1.25
HACC-6R8X-YY	6.8	1	10,20	40	7.96	35	0.22	1.2
HACC-8R2X-YY	8.2	1	10,20	40	7.96	25	0.24	1.15
HACC-100X-YY	10	1	10,20	40	2.52	21	0.25	1.1
HACC-120X-YY	12	0.02	10,20	35	2.52	17	0.27	1.05
HACC-150X-YY	15	0.02	10,20	35	2.52	16	0.3	1
HACC-180X-YY	18	0.02	10,20	35	2.52	15	0.33	0.95
HACC-220X-YY	22	0.02	10,20	35	2.52	13	0.37	0.9
HACC-270X-YY	27	0.02	10,20	35	2.52	11	0.42	0.85
HACC-102X-YY	1000	0.79	10,20	60	0.79	2.8	10.5	0.78

Material : Ferrite

SPQ :	Packing Form	Loose / Box	Taped / Ammopack
	Axial	2000 [-00]	1200 [-02]

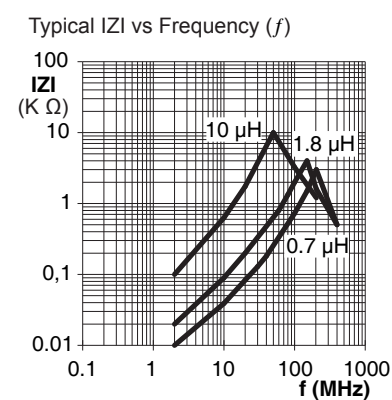
## HCCC



Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	DCR max (Ω)	Rated DC Current (A)
HCCC-R70X-YY	0.7	1	20	0.018	7
HCCC-1R0X-YY	1	1	10,20	0.018	4
HCCC-1R8X-YY	1.8	1	10,20	0.066	2.5
HCCC-3R6X-YY	3.6	1	10,20	0.132	1.8
HCCC-5R6X-YY	5.6	1	10,20	0.14	1.5
HCCC-8R2X-YY	8.2	1	10,20	0.276	1.5
HCCC-100X-YY	10	1	10,20	0.32	1.3

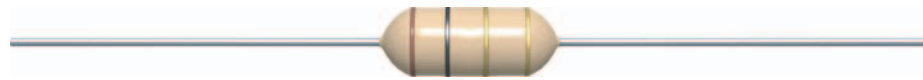
Material : Ferrite

SPQ :	Packing Form	Loose / Box	Reel	Taped / Ammopack
	Axial	1000 [-00]	2500 [-01]	1000 [-02]

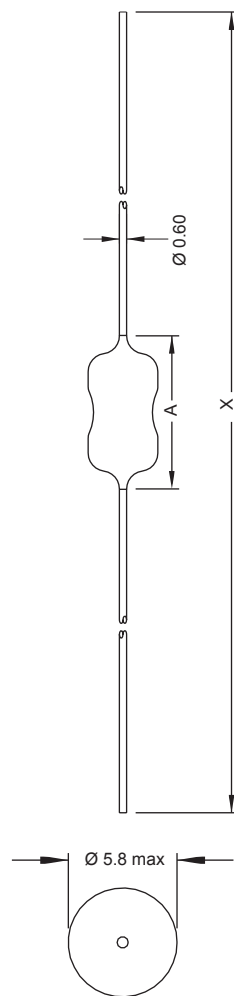


# HBCC

Similar to moulded CESH, page 30



All dimensions in mm

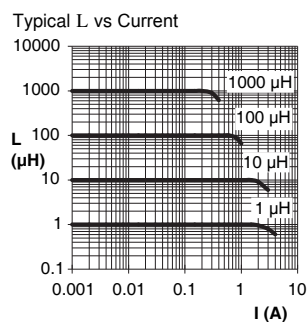
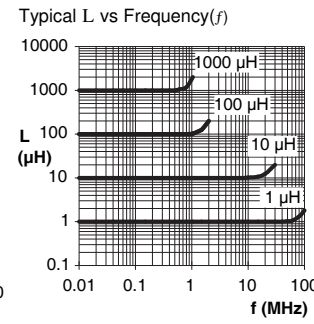
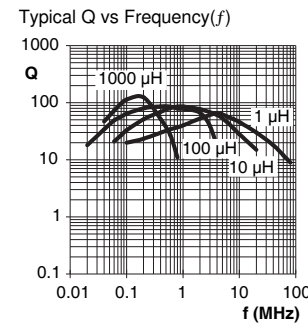


L (μH)	A (max)	X
1.0 - 18	14.5	63 72
22 - 100,000	12.8	66

Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)
HBCC-1R0X-YY	1	1	5.10	40	7.96	200	0.08	2.2
HBCC-1R2X-YY	1.2	1	5.10	40	7.96	185	0.09	2.15
HBCC-1R5X-YY	1.5	1	5.10	40	7.96	170	0.1	2.1
HBCC-1R8X-YY	1.8	1	5.10	40	7.96	155	0.1	2
HBCC-2R2X-YY	2.2	1	5.10	40	7.96	140	0.11	1.9
HBCC-2R7X-YY	2.7	1	5.10	40	7.96	130	0.12	1.8
HBCC-3R3X-YY	3.3	1	5.10	40	7.96	120	0.14	1.75
HBCC-3R9X-YY	3.9	1	5.10	40	7.96	110	0.15	1.7
HBCC-4R7X-YY	4.7	1	5.10	40	7.96	100	0.16	1.6
HBCC-5R6X-YY	5.6	1	5.10	40	7.96	90	0.17	1.55
HBCC-6R8X-YY	6.8	1	5.10	40	7.96	80	0.19	1.5
HBCC-8R2X-YY	8.2	1	5.10	40	7.96	70	0.2	1.45
HBCC-100X-YY	10	1	5.10	60	2.52	60	0.22	1.4
HBCC-120X-YY	12	0.02	5.10	60	2.52	40	0.26	1.3
HBCC-150X-YY	15	0.02	5.10	60	2.52	20	0.3	1.25
HBCC-180X-YY	18	0.02	5.10	60	2.52	17	0.33	1.2
HBCC-220X-YY	22	0.02	5.10	40	2.52	12	0.35	1.1
HBCC-250X-YY	25	0.02	5.10	40	2.52	10	0.39	1
HBCC-270X-YY	27	0.02	5.10	40	2.52	10	0.39	1
HBCC-330X-YY	33	0.02	5.10	40	2.52	8	0.43	0.9
HBCC-390X-YY	39	0.02	5.10	40	2.52	6.5	0.47	0.85
HBCC-470X-YY	47	0.02	5.10	40	2.52	5	0.5	0.8
HBCC-560X-YY	56	0.02	5.10	40	2.52	4.5	0.55	0.75
HBCC-680X-YY	68	0.02	5.10	30	2.52	4	0.6	0.7
HBCC-820X-YY	82	0.02	5.10	30	2.52	3.7	0.65	0.65
HBCC-101X-YY	100	0.02	5.10	50	0.796	3.5	0.7	0.6
HBCC-121X-YY	120	0.02	5.10	50	0.796	3.2	1	0.55
HBCC-151X-YY	150	0.02	5.10	50	0.796	3	1.2	0.5
HBCC-181X-YY	180	0.02	5.10	50	0.796	2.7	1.4	0.45
HBCC-221X-YY	220	0.02	5.10	50	0.796	2.4	1.6	0.4
HBCC-271X-YY	270	0.02	5.10	50	0.796	2.1	1.8	0.37
HBCC-331X-YY	330	0.02	5.10	50	0.796	1.9	2	0.33
HBCC-391X-YY	390	0.02	5.10	50	0.796	1.7	2.3	0.31
HBCC-471X-YY	470	0.02	5.10	40	0.796	1.5	2.5	0.28
HBCC-561X-YY	560	0.02	5.10	40	0.796	1.4	2.9	0.26
HBCC-681X-YY	680	0.02	5.10	40	0.796	1.3	3.2	0.24
HBCC-821X-YY	820	0.02	5.10	30	0.796	1.25	3.5	0.22
HBCC-102X-YY	1000	0.02	5.10	60	0.252	1.2	3.8	0.2
HBCC-122X-YY	1200	0.02	5.10	60	0.252	1.1	5.2	0.18
HBCC-152X-YY	1500	0.02	5.10	60	0.252	1	6.5	0.16
HBCC-182X-YY	1800	0.02	5.10	60	0.252	0.9	8	0.14
HBCC-222X-YY	2200	0.02	5.10	60	0.252	0.8	9	0.12
HBCC-272X-YY	2700	0.02	5.10	60	0.252	0.7	12	0.12
HBCC-332X-YY	3300	0.02	5.10	60	0.252	0.6	15	0.11
HBCC-392X-YY	3900	0.02	5.10	60	0.252	0.55	18	0.1
HBCC-472X-YY	4700	0.02	5.10	60	0.252	0.5	22	0.09
HBCC-532X-YY	5300	0.02	5.10	60	0.252	0.4	30	0.08
HBCC-682X-YY	6800	0.02	5.10	60	0.252	0.4	30	0.08
HBCC-103X-YY	10000	0.02	5.10	50	0.079	0.35	42	0.06
HBCC-153X-YY	15000	0.02	5.10	50	0.079	0.3	68	0.05
HBCC-183X-YY	18000	0.02	5.10	50	0.079	0.26	120	0.04
HBCC-223X-YY	22000	0.02	5.10	50	0.079	0.26	120	0.04
HBCC-333X-YY	33000	0.02	5.10	50	0.079	0.22	150	0.035
HBCC-363X-YY	36000	0.02	5.10	50	0.079	0.22	150	0.035
HBCC-473X-YY	47000	0.02	5.10	40	0.079	0.18	230	0.03
HBCC-683X-YY	68000	0.02	5.10	40	0.079	0.15	290	0.025
HBCC-104X-YY	100000	0.02	5.10	40	0.079	0.12	390	0.02

Material : Ferrite

SPQ :	Packing Form	Loose / Box	Reel	Taped / Ammopack
	Axial	1000 [-00]	1200 [-01]	600 [-02]
	Radial		1000 [-31]	1800 [-32]

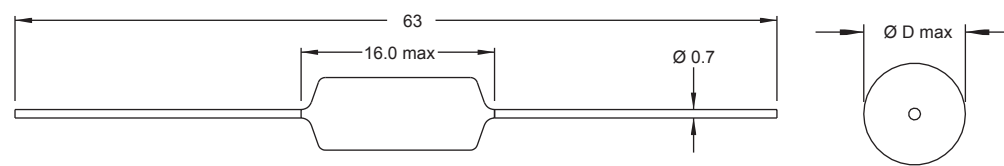




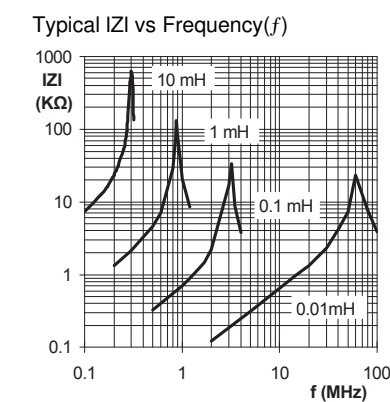
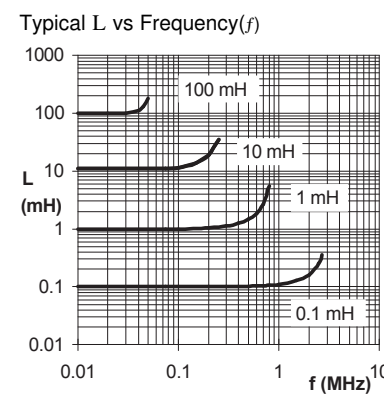
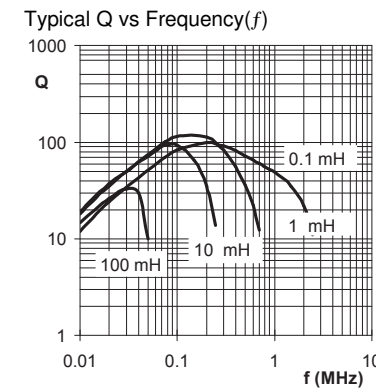
# VHBCC



L (μH)	Ø D max
47	6.3
10 - 33 & 68 - 100000	6.0



Part No	Inductance L (μH)	f <sub>i</sub> (kHz)	Tol ± (%)	Q min	f <sub>a</sub> (kHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)	
								I <sub>1</sub>	I <sub>sat</sub>
VHBCC-100X-YY	10	1000	5,10	55	2520	38	0.09	2900	4600
VHBCC-150X-YY	15	100	5,10	55	2520	36	0.13	2250	3800
VHBCC-220X-YY	22	100	5,10	50	2520	15	0.15	2030	3100
VHBCC-330X-YY	33	100	5,10	35	2520	5.2	0.16	1980	2550
VHBCC-470X-YY	47	100	5,10	30	2520	4.8	0.18	1800	2100
VHBCC-680X-YY	68	100	5,10	20	2520	3.8	0.25	1620	1790
VHBCC-101X-YY	100	100	5,10	40	796	2.5	0.62	1060	1490
VHBCC-151X-YY	150	100	5,10	35	796	2	0.8	960	1210
VHBCC-221X-YY	220	100	5,10	35	796	1.6	1.2	690	900
VHBCC-331X-YY	330	100	5,10	25	796	1.4	1.4	630	735
VHBCC-391X-YY	390	100	5,10	25	796	1.3	1.6	590	675
VHBCC-471X-YY	470	100	5,10	20	796	1.2	1.8	550	630
VHBCC-561X-YY	560	100	5,10	15	796	1.06	2.3	525	610
VHBCC-681X-YY	680	100	5,10	15	796	0.92	2.6	500	590
VHBCC-821X-YY	820	100	5,10	70	252	0.72	4.2	448	550
VHBCC-102X-YY	1000	100	5,10	70	252	0.72	4.2	400	490
VHBCC-122X-YY	1200	100	5,10	70	252	0.68	5.5	350	448
VHBCC-152X-YY	1500	100	5,10	70	252	0.65	6	320	400
VHBCC-182X-YY	1800	100	5,10	70	252	0.65	6	300	410
VHBCC-222X-YY	2200	100	5,10	65	252	0.5	10	250	340
VHBCC-272X-YY	2700	100	5,10	50	252	0.42	12	243	298
VHBCC-332X-YY	3300	100	5,10	50	252	0.42	12	220	270
VHBCC-392X-YY	3900	100	5,10	30	252	0.29	18	200	245
VHBCC-472X-YY	4700	100	5,10	30	252	0.31	18	200	220
VHBCC-562X-YY	5600	10	5,10	30	252	0.3	23	160	200
VHBCC-682X-YY	6800	10	5,10	25	252	0.29	26	150	180
VHBCC-822X-YY	8200	10	5,10	60	79.6	0.22	35	135	165
VHBCC-103X-YY	10000	10	5,10	60	79.6	0.2	40	120	150
VHBCC-123X-YY	12000	10	5,10	55	79.6	0.17	63	112	134
VHBCC-153X-YY	15000	10	5,10	55	79.6	0.17	63	100	120
VHBCC-183X-YY	18000	10	5,10	50	79.6	0.16	90	86	110
VHBCC-223X-YY	22000	10	5,10	50	79.6	0.15	100	82	100
VHBCC-273X-YY	27000	10	5,10	50	79.6	0.14	130	75	95
VHBCC-333X-YY	33000	10	5,10	50	79.6	0.14	130	67	85
VHBCC-473X-YY	47000	10	5,10	30	25.2	0.09	220	53	73
VHBCC-683X-YY	68000	10	5,10	25	25.2	0.08	270	49	59
VHBCC-104X-YY	100000	10	5,10	20	25.2	0.06	490	34	45



All dimensions in mm

Leaded Inductors

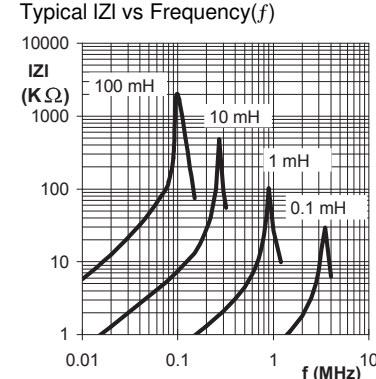
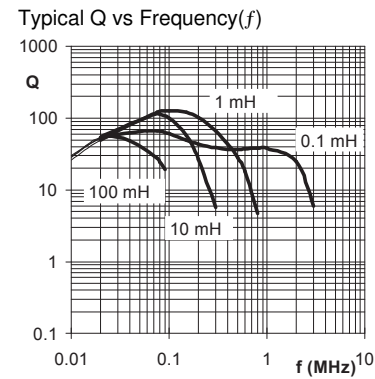
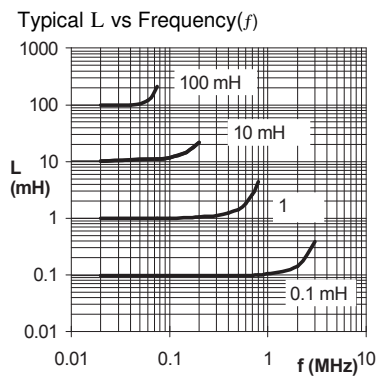
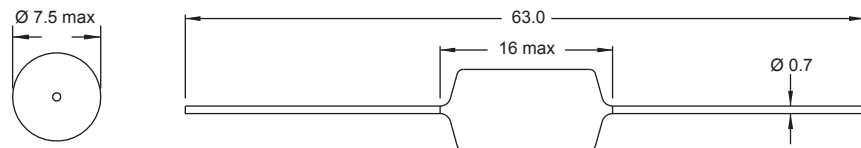
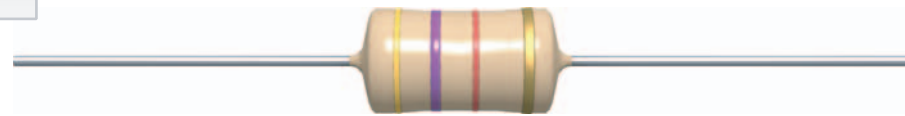
Material : Ferrite

SPQ :	Packing Form	Reel	Loose / Box
	Axial	1200 [-01]	500 [-00]

Remark : I<sub>1</sub> & I<sub>sat</sub> - see description in Technical Data page 31



# XHBCC



Part No	Inductance L (μH)	f <sub>L</sub> (kHz)	Tol ± (%)	Q min	f <sub>Q</sub> (kHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)	
								I <sub>1</sub>	I <sub>sat</sub>
XHBCC-101X-YY	100	20	10	30	796	2.5	0.24	1620	1860
XHBCC-151X-YY	150	20	10	30	796	2.1	0.39	1260	1510
XHBCC-221X-YY	220	20	10	25	796	1.8	0.49	1120	1260
XHBCC-331X-YY	330	20	10	25	796	1.4	0.83	870	1030
XHBCC-471X-YY	470	20	10	25	796	1.1	1.4	655	875
XHBCC-681X-YY	680	20	5,10	65	252	1	1.8	590	715
XHBCC-102X-YY	1000	20	5,10	70	252	0.75	2.7	485	595
XHBCC-152X-YY	1500	20	5,10	60	252	0.6	4.4	375	485
XHBCC-172X-YY	1700	20	5,10	60	252	0.5	5	335	415
XHBCC-202X-YY	2000	20	5,10	60	252	0.51	5.2	345	435
XHBCC-222X-YY	2200	20	5,10	55	252	0.5	5.5	335	415
XHBCC-242X-YY	2400	20	5,10	55	252	0.49	5.6	330	380
XHBCC-252X-YY	2500	20	5,10	50	252	0.46	5.9	325	375
XHBCC-272X-YY	2700	20	5,10	50	252	0.45	6.1	320	360
XHBCC-302X-YY	3000	20	5,10	50	252	0.44	6.5	310	340
XHBCC-332X-YY	3300	20	5,10	45	252	0.42	7.2	295	320
XHBCC-352X-YY	3500	20	5,10	45	252	0.35	7.6	285	310
XHBCC-362X-YY	3600	20	5,10	45	252	0.34	7.9	280	305
XHBCC-452X-YY	4500	20	5,10	40	252	0.34	10	245	275
XHBCC-472X-YY	4700	20	5,10	40	252	0.34	12	230	270
XHBCC-532X-YY	5300	20	5,10	35	252	0.31	13	225	255
XHBCC-682X-YY	6800	20	5,10	95	79.6	0.23	16	195	225
XHBCC-103X-YY	10000	20	5,10	90	79.6	0.21	28	150	185
XHBCC-153X-YY	15000	20	5,10	90	79.6	0.19	35	130	155
XHBCC-223X-YY	22000	20	5,10	70	79.6	0.14	52	110	125
XHBCC-333X-YY	33000	20	5,10	30	79.6	0.1	80	90	105
XHBCC-473X-YY	47000	20	5,10	55	25	0.08	97	80	85
XHBCC-683X-YY	68000	20	5,10	55	25	0.07	150	65	70
XHBCC-104X-YY	100000	20	5,10	40	25	0.06	245	50	60

Material : Ferrite

SPQ :

Packing Form	Reel	Taped / Ammopack
Axial	800 [-01]	300 [-02]

Remark : I<sub>1</sub> & I<sub>sat</sub> - see description in Technical Data page 31

All dimensions in mm

Leaded Inductors





## Suppression Coils

FASTRON suppression coils come with high rated currents and low DC resistance characteristics. Inductance values range from 1µH to 10 000µH. They are available in tape and ammopack packing.

**Applications** Communication: RF blocking, filtering and decoupling  
Others: entertainment electronics and interference suppression

Technical Data	
L – Value (rated inductance)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_L$
DCR (max)	Measured at 25°C
Rated DC Current	I based on temperature rise, determined at the point where the temperature rise does not exceed 40°C above the ambient temperature of 25°C
Operating Temperature	-55°C to +125°C (includes component self-heating)
Recommended soldering method	Wave
Solderability	Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
Resistance to Soldering Heat	Resistant to 260°C ± 5°C for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb)
Resistance to Solvent	Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45
Climatic Test	Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: +125°C for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
Thermal Shock Test	Temperature cycle : -55°C to +125°C to -55°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G
Tensile Strength of Leads	Components withstand a pulling force of 20N for 10 ± 1 seconds IEC 60068-2-21 (Ua <sub>1</sub> )
Mechanical Shock	Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

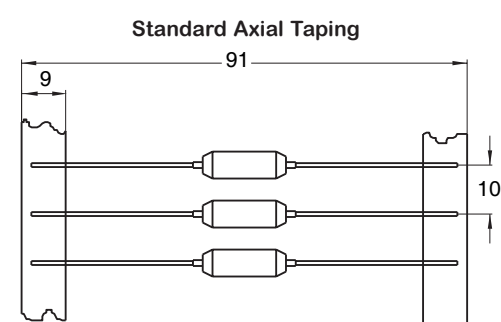
All dimensions in mm

Technical Data & Packing Spec

**Ordering Code** Example: **MISC-100X-01**  
 (Model) - (Inductance Value) (Tolerance) - (Packing Code)

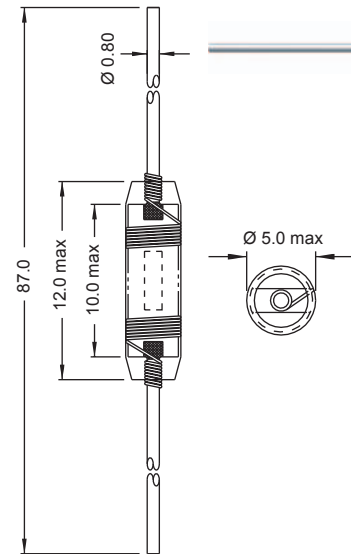
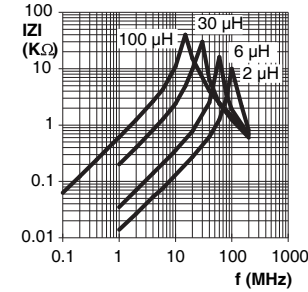
- Core Types - Ferrite, Iron Dust
- Tolerances - K (10%), M (20%)
- **Bold is standard tolerance**
- Packing Code - 00 (Loose in Box), 01 (Reel)

### Packing Specification



## MISC

Typical IZI vs Frequency (f)



Part No	Inductance L (μH)	f <sub>l</sub> (kHz)	Tol ± (%)	DCR (mΩ)	Rated DC Current (A)
MISC-1R0M-YY	1	1000	20	18	4
MISC-2R0M-YY	2	1000	20	54	3
MISC-3R0M-YY	3	1000	20	93	2
MISC-6R0M-YY	6	1000	20	228	1.5
MISC-140M-YY	14	100	20	912	0.7
MISC-300M-YY	30	100	20	3240	0.4
MISC-400M-YY	40	100	20	4290	0.3
MISC-101M-YY	100	100	20	22800	0.15

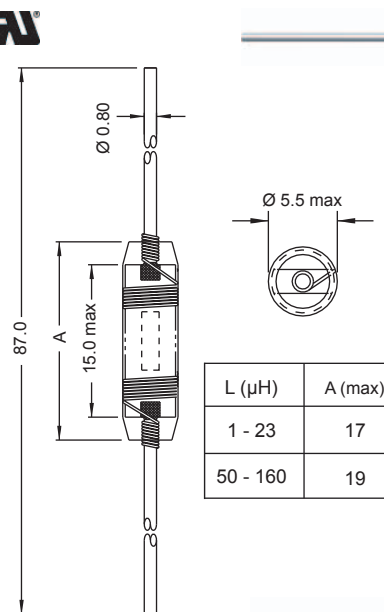
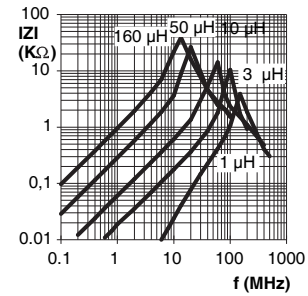
Material : Iron Dust      SPQ : 

Packing Form	Reel
Axial	1500 [-01]

Remark : - Available also without insulating material (MISC/B)  
- Loose packing [-00] available on request

## SMSC

Typical IZI vs Frequency (f)



L (μH)	A (max)
1 - 23	17
50 - 160	19

Part No	Inductance L (μH)	f <sub>l</sub> (kHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current (A)
SMSC-1R0M-YY	1	1000	20	14	6
SMSC-2R0M-YY	2	1000	20	24	4
SMSC-3R0M-YY	3	1000	20	46	3
SMSC-6R0M-YY	6	1000	20	144	2
SMSC-100M-YY	10	1000	20	276	1.5
SMSC-230M-YY	23	100	20	876	0.7
SMSC-500M-YY	50	100	20	3600	0.4
SMSC-700M-YY	70	100	20	5400	0.3
SMSC-161M-YY	160	100	20	21600	0.15

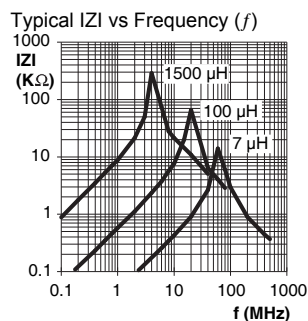
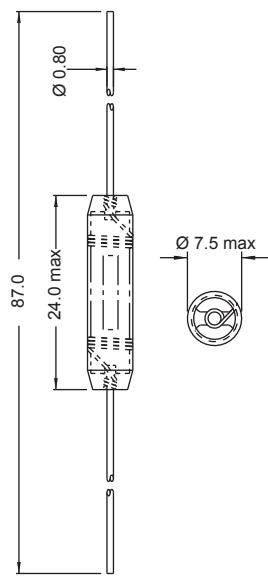
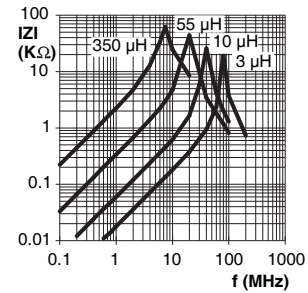
Material : Iron Dust      SPQ : 

Packing Form	Reel
Axial	1500 [-01]

Remark : - Available also without insulating material (SMSC/B)  
- Loose packing [-00] available on request

## MESC

Typical IZI vs Frequency (f)

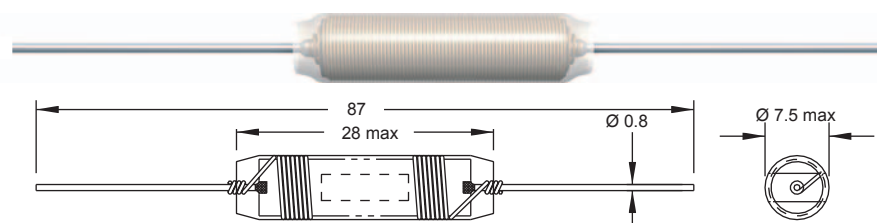


Part No	Inductance L (μH)	f <sub>l</sub> (kHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current (A)	Material
MESC-3R0M-YY	3	1000	20	22	6	Iron Dust
MESC-3R3M-YY	3.3	100	20	22	1.61	Iron Dust
MESC-5R0M-YY	5	1000	20	41	4	Iron Dust
MESC-100M-YY	10	1000	20	105	3	Iron Dust
MESC-150M-YY	15	100	20	198	2	Iron Dust
MESC-250M-YY	25	100	20	408	1.5	Iron Dust
MESC-550M-YY	55	100	20	1560	0.7	Iron Dust
MESC-131M-YY	130	100	20	5760	0.15	Iron Dust
MESC-161M-YY	160	100	20	7920	0.3	Iron Dust
MESC-351M-YY	350	100	20	2520	0.15	Iron Dust
MESC-7R0M-YY	7	1000	20	24	6	Ferrite
MESC-120M-YY	12	100	20	48	4	Ferrite
MESC-220M-YY	22	100	20	84	3	Ferrite
MESC-400M-YY	40	100	20	216	2	Ferrite
MESC-560M-YY	56	100	20	360	1.5	Ferrite
MESC-750M-YY	75	100	20	780	0.7	Ferrite
MESC-101M-YY	100	100	20	780	1	Ferrite
MESC-221M-YY	220	100	20	3120	0.5	Ferrite
MESC-471M-YY	470	100	20	7800	0.3	Ferrite
MESC-681M-YY	680	100	20	16800	0.2	Ferrite
MESC-122M-YY	1200	100	20	40800	0.1	Ferrite
MESC-152M-YY	1500	100	20	64800	0.08	Ferrite

SPQ : 

Packing Form	Reel
Axial	1000 [-01]

Remark : - Available also without insulating material (MESC/B)  
- Loose packing [-00] available on request



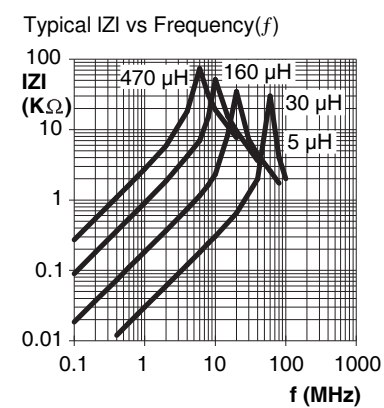
Part No	Inductance L (μH)	f <sub>L</sub> (kHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current (A)
LASC-5R0M-YY	5	1000	20	28	6
LASC-6R0M-YY	6	1000	20	36	5
LASC-7R0M-YY	7	1000	20	42	4
LASC-120M-YY	12	100	20	100	3
LASC-200M-YY	20	100	20	204	2
LASC-300M-YY	30	100	20	420	1.5
LASC-600M-YY	60	100	20	924	0.7
LASC-750M-YY	75	100	20	1560	0.7
LASC-151M-YY	150	100	20	4200	0.4
LASC-161M-YY	160	100	20	4560	0.4
LASC-211M-YY	210	100	20	7680	0.3
LASC-231M-YY	230	100	20	8640	0.3
LASC-421M-YY	420	100	20	22800	0.15
LASC-471M-YY	470	100	20	24000	0.15

Material : Iron Dust

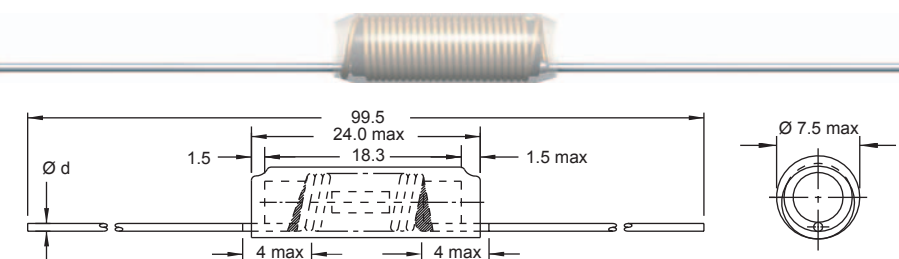
SPQ :

Packing Form	Reel
Axial	1000 [-01]

Remark : - Available also without insulating material (LASC/B)  
- Loose packing [-00] available on request



All dimensions in mm



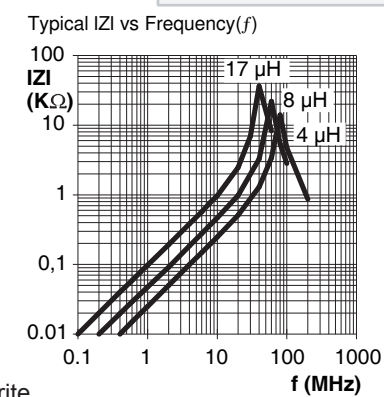
Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current (A)	∅ d (mm)
SSSC-4R0M-00	4	1	20	14	6	0.8
SSSC-6R0M-00	6	1	20	17	4	0.75
SSSC-8R0M-00	8	1	20	25	3	0.63, 0.65
SSSC-170M-00	17	0.1	20	63	2	0.45

Material : Ferrite

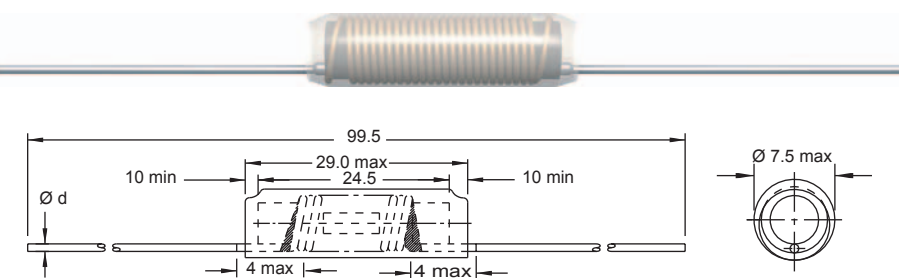
SPQ :

Packing Form	Loose / Box
Axial	500 [-00]

Remark : Available also without insulating material (SSSC/B)



Suppression Coils



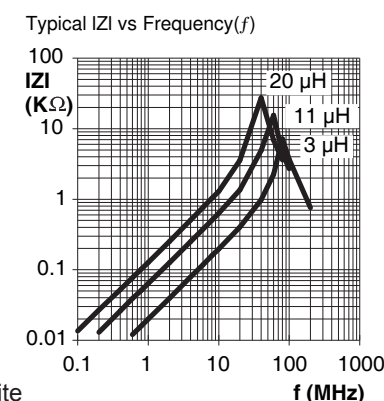
Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current (A)	∅ d (mm)
MSSC-3R0M-00	3	1	20	6	9	1.18
MSSC-6R0M-00	6	1	20	10	6	0.95
MSSC-110M-00	11	0.1	20	20	4	0.7
MSSC-130M-00	13	0.1	20	24	3	0.7
MSSC-200M-00	20	0.1	20	54	3	0.5

Material : Ferrite

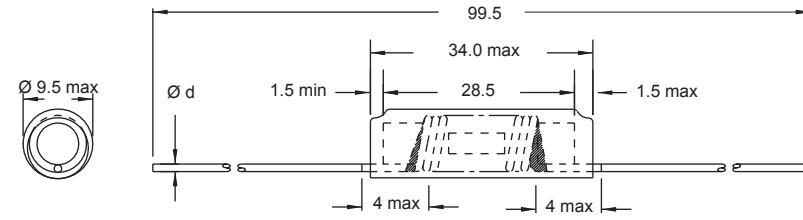
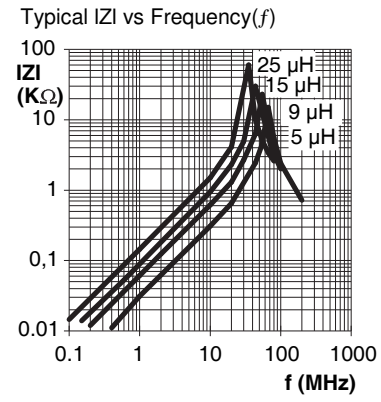
SPQ :

Packing Form	Loose / Box
Axial	350 [-00]

Remark : Available also without insulating material (MSSC/B)



# LSSC

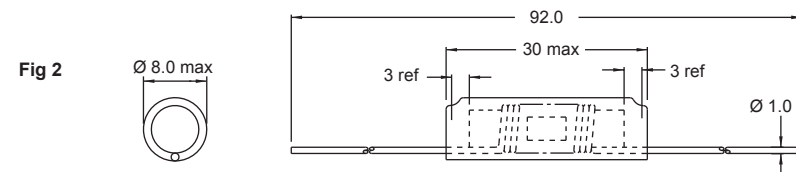
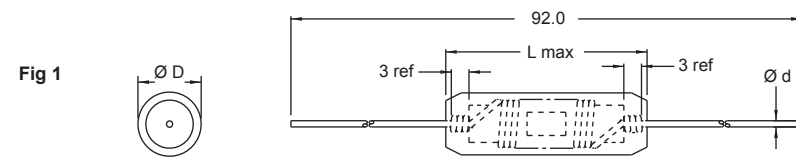
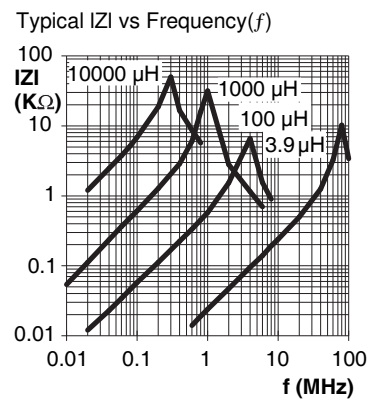


Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current (A)	Ø d (mm)
LSSC-5R0M-00	5	1	20	5	10	1.3
LSSC-9R0M-00	9	1	20	12	6	0.95
LSSC-150M-00	15	0.1	20	24	4	0.75
LSSC-250M-00	25	0.1	20	46	3	0.63

**Material :** Ferrite **Remark :** Available also without insulating material (LSSC/B)  
**SPQ :**

Packing Form	Loose / Box
Axial	200 [-00]

# 77A



Part No	Inductance L (μH)	f <sub>L</sub> (kHz)	Tol ± (%)	DCR max (Ω)	Rated DC Current (A)	Dimension (mm)			Fig
						D max	L max	d	
77A-3R9M-YY	3.9	1000	20	0.011	12	8	30	1	2
77A-5R6M-YY	5.6	1000	20	0.021	8	8	26	0.8	1
77A-100M-YY	10	1000	20	0.042	5	8	26	0.8	1
77A-150M-YY	15	100	20	0.06	4	9	26	0.8	1
77A-330M-YY	33	100	20	0.084	3.5	10	26	0.8	1
77A-400M-YY	40	100	20	0.084	3	11	26	0.8	1
77A-680M-YY	68	100	20	0.12	3	11	26	0.8	1
77A-800M-YY	80	100	20	0.15	2.5	11	26	0.8	1
77A-101M-YY	100	100	20	0.18	2.5	11	26	0.8	1
77A-121M-YY	120	100	20	0.36	2	11	26	0.8	1
77A-151M-YY	150	100	20	0.36	1.8	11	26	0.8	1
77A-331M-YY	330	100	20	0.6	1.4	11	26	0.8	1
77A-471M-YY	470	100	20	1.2	1	11	26	0.8	1
77A-501M-YY	500	100	20	0.84	1.2	11	26	0.8	1
77A-681M-YY	680	100	20	1.2	1	11	26	0.8	1
77A-821M-YY	820	100	20	1.2	0.95	11	26	0.8	1
77A-102M-YY	1000	100	20	1.8	0.8	11	26	0.8	1
77A-152M-YY	1500	10	20	2.4	0.7	11	26	0.8	1
77A-332M-YY	3300	10	20	4.8	0.5	11	26	0.8	1
77A-562M-YY	5600	10	20	9.6	0.36	11	26	0.8	1
77A-682M-YY	6800	10	20	9.6	0.35	11	26	0.8	1
77A-103M-YY	10000	10	20	14.4	0.3	11	26	0.8	1

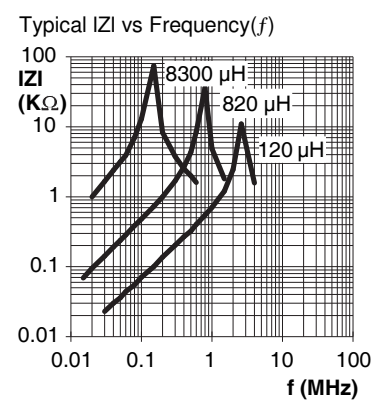
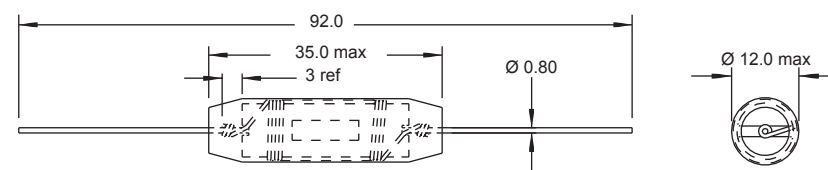
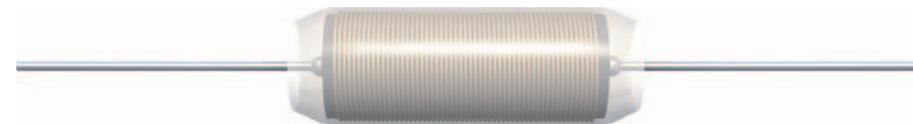
**Material :** Ferrite  
**SPQ :**

Loose / Box	Reel
300 [-00]	500 [-01]

**Remark :** - Available also without insulating material (77A/B)  
 - Fig 2 available only in loose packing [-00]



**50 A**



Part No	Inductance L (µH)	f <sub>i</sub> (kHz)	Tol ± (%)	DCR max (Ω)	Rated DC Current (A)
50A-121M-00	120	100	20	0.2	2
50A-181M-00	180	100	20	0.7	1.5
50A-331M-00	330	100	20	0.84	1
50A-821M-00	820	100	20	3	0.5
50A-302M-00	3000	10	20	24	0.2
50A-392M-00	3900	10	20	24	0.2
50A-832M-00	8300	10	20	78	0.1

Material : Ferrite

SPQ :

Packing Form	Loose / Box
Axial	150 [-00]

Remark : Available also without insulating material (50A/B)

All dimensions in mm

Suppression Coils



## Plugable Inductors (Pin Type Coils)

FASTRON plugable inductors offer a wide range of inductance values from 10µH to 150 000µH and a high Q. They come in shielded, tube and cap versions able to protect the winding. They are available in reel packing and ammpack.

### Applications Applii

### Technical Data

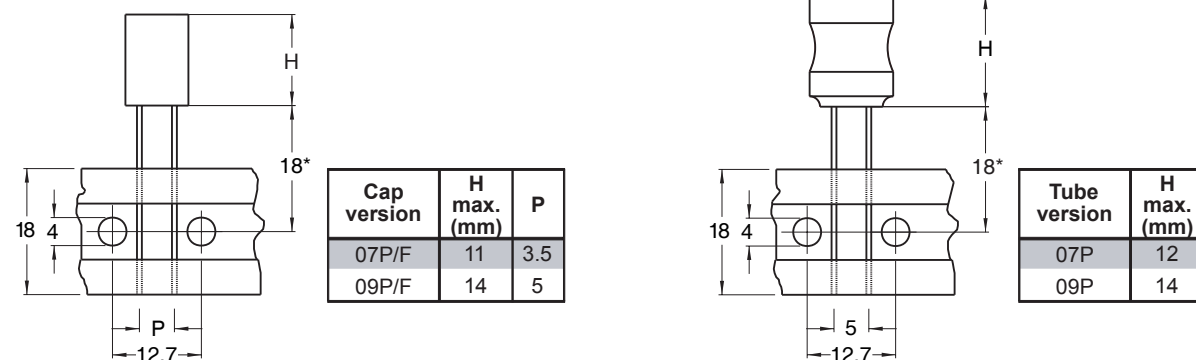
L – Value (rated inductance)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_L$
Q – Factor (min)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_Q$
SRF (min)	Measured with HP 8714 RF Network Analyzer
DCR (max)	Measured at 25°C
Rated DC Current	I based on temperature rise, determined at the point where the temperature rise does not exceed 40°C above the ambient temperature of 25°C
Operating Temperature	-55°C to +85°C
Recommended soldering method	Wave
Solderability	Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
Resistance to Soldering Heat	Resistant to 260°C ± 5°C for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb)
Resistance to Solvent	Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45
Climatic Test	Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: + 85°C for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
Thermal Shock Test	Temperature cycle : -55°C to + 85°C to -55°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G
Tensile Strength of Leads	Components withstand a pulling force of 10N for 10 ± 1 seconds IEC 60068-2-21 (Ua1)
Mechanical Shock	Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

**Ordering Code** Example: **09P-101X-51**  
 09P - (Model)    101 - (Inductance Value)    X - (Tolerance)    51 - (Packing Code)

- Core Type            - Ferrite
- Tolerances         - J (5%), K (10%)
- **Bold is standard tolerance**
- Packing Code      - 50 (Loose in Box), 51 (Reel)

### Packing Specification

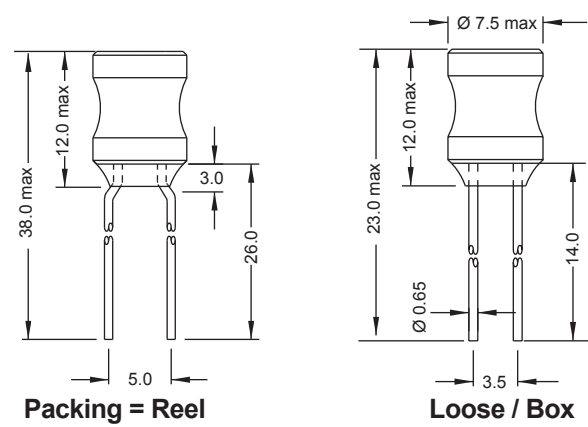
### Reel Taping (51)



\*according to IEC 286 (also available 16mm)



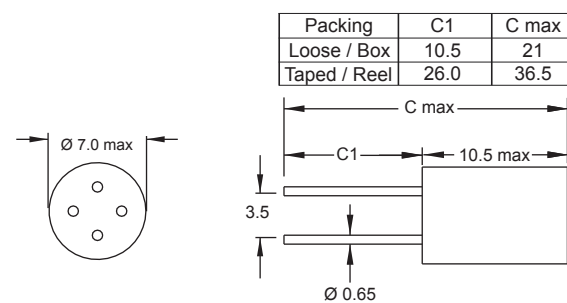
(with tube) **07P**



Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	ToI. ± (%)	Q min	f <sub>0</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
07P-101X-YY	100	0.02	5,10	60	2.52	5	0.5	460
07P-151X-YY	150	0.02	5,10	70	0.796	4	0.85	350
07P-201X-YY	200	0.02	5,10	80	0.796	3.2	1	320
07P-221X-YY	220	0.02	5,10	80	0.796	3	1	320
07P-251X-YY	250	0.02	5,10	75	0.796	2.8	1.2	300
07P-681X-YY	680	0.02	5,10	80	0.796	2.3	3.7	170
07P-821X-YY	820	0.02	5,10	80	0.796	2.1	4.1	160
07P-102X-YY	1000	0.02	5,10	100	0.252	1.8	5.4	150
07P-122X-YY	1200	0.02	5,10	100	0.252	1.6	5.8	140
07P-152X-YY	1500	0.02	5,10	100	0.252	1.5	6.5	130
07P-182X-YY	1800	0.02	5,10	100	0.252	1.4	7.5	120
07P-222X-YY	2200	0.02	5,10	100	0.252	1.3	8.8	110
07P-272X-YY	2700	0.02	5,10	100	0.252	1.2	9.8	100
07P-332X-YY	3300	0.02	5,10	100	0.252	1.1	13	80
07P-392X-YY	3900	0.02	5,10	100	0.252	1	16.5	75
07P-472X-YY	4700	0.02	5,10	100	0.252	0.9	18.5	70
07P-562X-YY	5600	0.02	5,10	100	0.252	0.8	21	60
07P-682X-YY	6800	0.02	5,10	100	0.252	0.7	29	55
07P-822X-YY	8200	0.02	5,10	100	0.252	0.65	33	50

Material : Ferrite

SPQ :	Packing Form	Loose / Box	Reel
	Radial	500 [-50]	700 [-51]

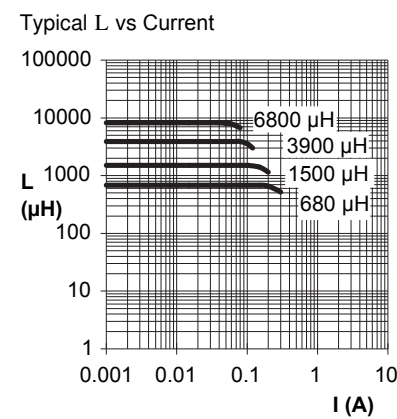


Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	ToI. ± (%)	Q min	f <sub>0</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
07P/F-681X-YY	680	0.02	10	80	0.796	2.3	3.7	170
07P/F-821X-YY	820	0.02	10	80	0.796	2.1	4.1	160
07P/F-102X-YY	1000	0.02	5,10	100	0.252	1.8	5.4	150
07P/F-122X-YY	1200	0.02	5,10	100	0.252	1.6	5.8	140
07P/F-152X-YY	1500	0.02	5,10	100	0.252	1.5	6.5	130
07P/F-182X-YY	1800	0.02	5,10	100	0.252	1.4	7.5	120
07P/F-222X-YY	2200	0.02	5,10	100	0.252	1.3	8.8	110
07P/F-272X-YY	2700	0.02	5,10	100	0.252	1.2	9.8	100
07P/F-332X-YY	3300	0.02	5,10	100	0.252	1.1	13	80
07P/F-392X-YY	3900	0.02	5,10	100	0.252	1	16.5	75
07P/F-472X-YY	4700	0.02	5,10	100	0.252	0.9	18.5	70
07P/F-562X-YY	5600	0.02	5,10	100	0.252	0.8	21	60
07P/F-682X-YY	6800	0.02	5,10	100	0.252	0.7	29	55
07P/F-822X-YY	8200	0.02	5,10	100	0.252	0.65	33	50

Material : Ferrite

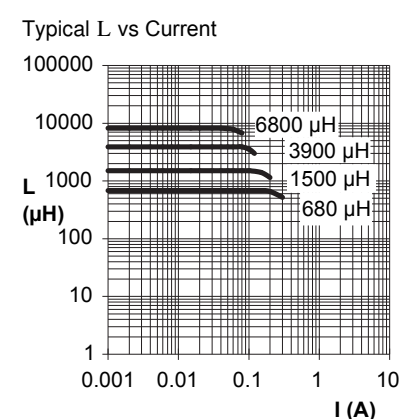
SPQ :	Packing Form	Loose / Box	Reel
	Radial	500 [-50]	700 [-51]

(with cap) **07P/F**

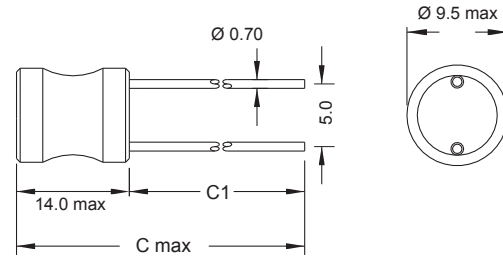


All dimensions in mm

Pluggable Inductors

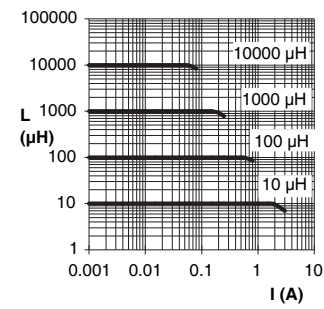


**09P** (with tube)



Packing	C1	C max
Loose / Box	14	28
Taped / Reel	27	41

Typical L vs Current



Part No	Inductance L (µH)	f <sub>l</sub> (MHz)	Tol. ± (%)	Q min	f <sub>q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
09P-120X-YY	12	0.02	5,10	60	2.52	15	0.04	2000
09P-150X-YY	15	0.02	5,10	50	2.52	15	0.04	2000
09P-220X-YY	22	0.02	5,10	40	2.52	12	0.05	1650
09P-270X-YY	27	0.02	5,10	35	2.52	10.5	0.08	1500
09P-330X-YY	33	0.02	5,10	30	2.52	9	0.08	1350
09P-470X-YY	47	0.02	5,10	30	2.52	7	0.1	1100
09P-560X-YY	56	0.02	5,10	30	2.52	7	0.12	950
09P-680X-YY	68	0.02	5,10	30	2.52	6	0.2	950
09P-101X-YY	100	0.02	5,10	40	0.796	5	0.3	790
09P-121X-YY	120	0.02	5,10	40	0.796	4.6	0.35	720
09P-151X-YY	150	0.02	5,10	40	0.796	4	0.4	650
09P-171X-YY	170	0.02	5,10	40	0.796	3.5	0.45	1000
09P-181X-YY	180	0.02	5,10	40	0.796	3.6	0.45	580
09P-211X-YY	210	0.02	5,10	30	0.796	3.5	2	550
09P-221X-YY	220	0.02	5,10	30	0.796	3.3	0.5	530
09P-271X-YY	270	0.02	5,10	30	0.796	3	0.6	490
09P-331X-YY	330	0.02	5,10	35	0.796	2.7	1	500
09P-391X-YY	390	0.02	5,10	35	0.796	2.5	1.1	460
09P-471X-YY	470	0.02	5,10	35	0.796	2.3	1.3	420
09P-561X-YY	560	0.02	5,10	35	0.796	2	1.5	400
09P-681X-YY	680	0.02	5,10	35	0.796	1.9	1.9	350
09P-821X-YY	820	0.02	5,10	35	0.796	1.7	2.2	310
09P-102X-YY	1000	0.02	5,10	70	0.252	1.6	2.6	280
09P-122X-YY	1200	0.02	5,10	70	0.252	1.4	3	250
09P-152X-YY	1500	0.02	5,10	70	0.252	1.2	5.1	220
09P-182X-YY	1800	0.02	5,10	70	0.252	1.1	5.6	200
09P-222X-YY	2200	0.02	5,10	70	0.252	1	7	180
09P-272X-YY	2700	0.02	5,10	70	0.252	0.9	8	170
09P-332X-YY	3300	0.02	5,10	70	0.252	0.8	9	150
09P-392X-YY	3900	0.02	5,10	70	0.252	0.75	10	140
09P-472X-YY	4700	0.02	5,10	70	0.252	0.65	11.5	130
09P-562X-YY	5600	0.02	5,10	70	0.252	0.63	15	120
09P-682X-YY	6800	0.02	5,10	70	0.252	0.57	17	110
09P-822X-YY	8200	0.02	5,10	70	0.252	0.5	20	100
09P-103X-YY	10000	0.02	5,10	70	0.079	0.41	35	90
09P-123X-YY	12000	0.02	5,10	70	0.079	0.38	40	80
09P-153X-YY	15000	0.02	5,10	70	0.079	0.35	45	70
09P-183X-YY	18000	0.02	5,10	70	0.079	0.34	50	65
09P-223X-YY	22000	0.02	5,10	70	0.079	0.3	58	60
09P-273X-YY	27000	0.02	5,10	70	0.079	0.29	70	55
09P-333X-YY	33000	0.02	5,10	70	0.079	0.26	75	50

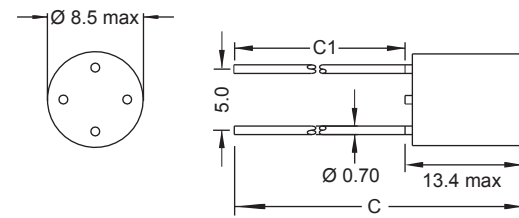
Material : Ferrite

SPQ :

Packing Form	Loose / Box	Reel
Radial	500 [-50]	500 [-51]



(with cap) **09 P/F**

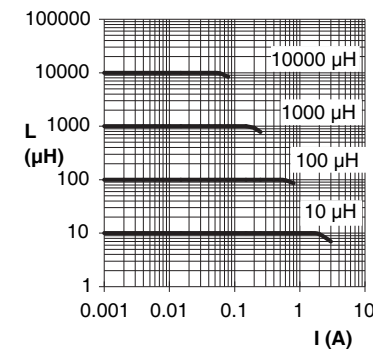


Packing	C1	C
Loose / Box	10.5	23.9
Taped / Reel	26.0	39.4



Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	ToI. ± (%)	Q min	f <sub>Q</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
09P/F-100K-YY	10	0.02	10	70	2.52	18	0.03	2400
09P/F-150K-YY	15	0.02	10	50	2.52	15	0.04	2000
09P/F-220K-YY	22	0.02	10	40	2.52	12	0.05	1650
09P/F-330K-YY	33	0.02	10	30	2.52	9	0.08	1350
09P/F-470K-YY	47	0.02	10	30	2.52	7	0.1	1100
09P/F-680K-YY	68	0.02	10	30	2.52	6	0.2	950
09P/F-101K-YY	100	0.02	10	40	0.796	5	0.3	790
09P/F-121K-YY	120	0.02	10	40	0.796	4.6	0.35	720
09P/F-151K-YY	150	0.02	10	40	0.796	4	0.4	650
09P/F-181K-YY	180	0.02	10	40	0.796	3.6	0.45	580
09P/F-211K-YY	210	0.02	10	30	0.796	3.3	0.5	530
09P/F-221K-YY	220	0.02	10	30	0.796	3.3	0.5	530
09P/F-271K-YY	270	0.02	10	30	0.796	3	0.6	500
09P/F-331K-YY	330	0.02	10	35	0.796	2.7	1	490
09P/F-391K-YY	390	0.02	10	35	0.796	2.5	1.1	460
09P/F-471K-YY	470	0.02	10	35	0.796	2.3	1.3	420
09P/F-561K-YY	560	0.02	10	35	0.796	2	1.5	400
09P/F-681K-YY	680	0.02	10	35	0.796	1.9	1.9	350
09P/F-821K-YY	820	0.02	10	35	0.796	1.7	2.2	310
09P/F-102X-YY	1000	0.02	5,10	70	0.252	1.6	2.6	280
09P/F-122X-YY	1200	0.02	5,10	70	0.252	1.4	3	250
09P/F-152X-YY	1500	0.02	5,10	70	0.252	1.2	5.1	220
09P/F-182X-YY	1800	0.02	5,10	70	0.252	1.1	5.6	200
09P/F-222X-YY	2200	0.02	5,10	70	0.252	1	7	180
09P/F-272X-YY	2700	0.02	5,10	70	0.252	0.9	8	170
09P/F-332X-YY	3300	0.02	5,10	70	0.252	0.8	9	150
09P/F-392X-YY	3900	0.02	5,10	70	0.252	0.75	10	140
09P/F-472X-YY	4700	0.02	5,10	70	0.252	0.65	11.5	130
09P/F-562X-YY	5600	0.02	5,10	70	0.252	0.63	15	120
09P/F-682X-YY	6800	0.02	5,10	70	0.252	0.57	17	110
09P/F-822X-YY	8200	0.02	5,10	70	0.252	0.5	20	100
09P/F-103X-YY	10000	0.02	5,10	70	0.079	0.41	35	90
09P/F-123X-YY	12000	0.02	5,10	70	0.079	0.38	40	80
09P/F-153X-YY	15000	0.02	5,10	70	0.079	0.35	45	70
09P/F-183X-YY	18000	0.02	5,10	70	0.079	0.34	50	65
09P/F-223X-YY	22000	0.02	5,10	70	0.079	0.3	58	60
09P/F-273X-YY	27000	0.02	5,10	70	0.079	0.29	70	55
09P/F-333X-YY	33000	0.02	5,10	70	0.079	0.26	75	50

Typical L vs Current



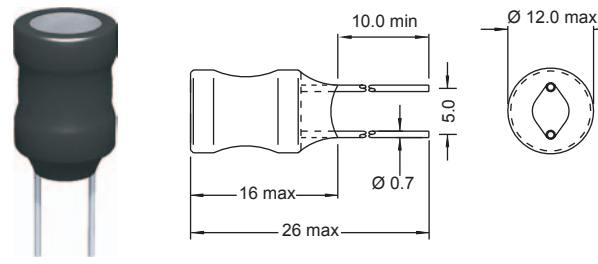
All dimensions in mm

Pluggable Inductors

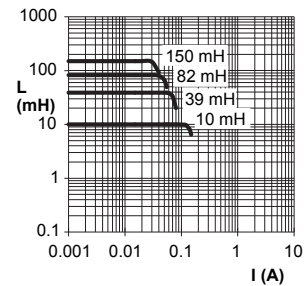
Material : Ferrite

SPQ :	Packing Form	Loose / Box	Reel
	Radial	500 [-50]	500 [-51]

# 11P (with tube)



Typical L vs Current



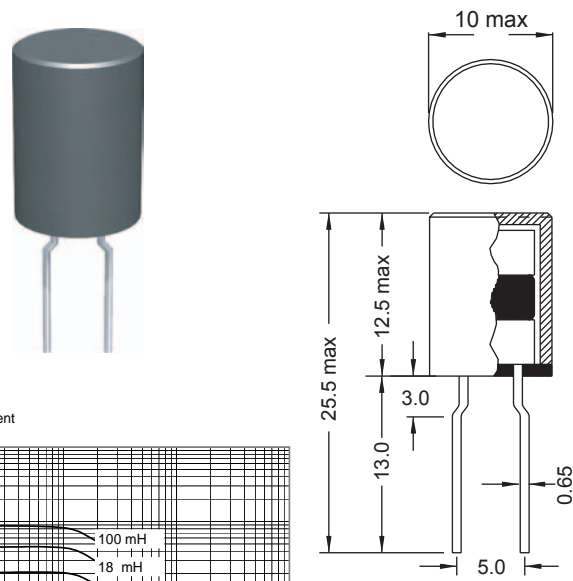
Part No	Inductance L (mH)	f <sub>L</sub> (MHz)	Tol. ± (%)	Q min	f <sub>0</sub> (MHz)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (mA)
11P-100K-50	0.01	0.02	10	70	2.52	20	0.035	3500
11P-101K-50	0.1	0.02	10	40	0.079	3.4	0.2	950
11P-221K-50	0.22	0.02	10	40	0.079	2.3	0.32	700
11P-331K-50	0.33	0.02	10	30	0.079	1.88	0.6	590
11P-471K-50	0.47	0.02	10	25	0.079	1.55	0.7	470
11P-561K-50	0.56	0.02	10	20	0.079	1.5	0.8	430
11P-761K-50	0.76	0.02	10	15	0.079	1.4	0.9	360
11P-332X-50	3.3	0.02	5,10	47	0.252	0.6	3.7	190
11P-103X-50	10	0.02	5,10	50	0.079	0.35	23	110
11P-123X-50	12	0.02	5,10	50	0.079	0.32	24	100
11P-153X-50	15	0.02	5,10	50	0.079	0.29	28	90
11P-183X-50	18	0.02	5,10	50	0.079	0.28	34	85
11P-223X-50	22	0.02	5,10	50	0.079	0.25	39	70
11P-273X-50	27	0.02	5,10	50	0.079	0.21	48	70
11P-333X-50	33	0.02	5,10	50	0.079	0.2	56	65
11P-373K-50	37	0.02	5,10	50	0.079	0.19	62	60
11P-393X-50	39	0.02	5,10	50	0.079	0.19	62	60
11P-473X-50	47	0.02	5,10	50	0.079	0.18	73	55
11P-563X-50	56	0.02	5,10	50	0.079	0.14	115	50
11P-683X-50	68	0.02	5,10	50	0.079	0.13	120	50
11P-823X-50	82	0.02	5,10	50	0.079	0.12	150	45
11P-104X-50	100	0.02	5,10	50	0.025	0.11	155	40
11P-124X-50	120	0.02	5,10	50	0.025	0.09	186	37
11P-154X-50	150	0.02	5,10	50	0.025	0.08	205	35

Material : Ferrite

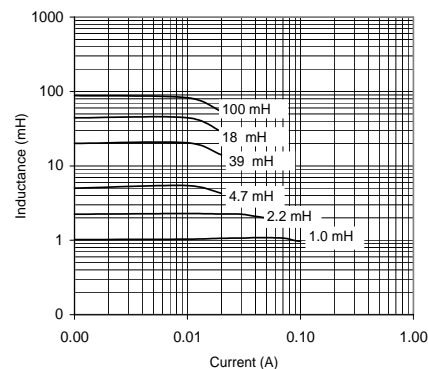
SPQ :

Packing Form	Loose / Box
Radial	250 [-50]

# 07M (shielded)



Typical L vs Current



Remark : Also available in 3.5mm pitch (07MFG)

Part No	Inductance L (mH)	f <sub>L</sub> (MHz)	Tol. ± (%)	Q min	f <sub>0</sub> (MHz)	DCR max (Ω)	Rated DC Current (mA)
07M-102M-50	1	0.02	10	70	0.252	3.4	90
07M-122M-50	1.2	0.02	10	70	0.252	3.7	75
07M-152M-50	1.5	0.02	10	70	0.252	4	70
07M-182M-50	1.8	0.02	10	70	0.252	4.5	65
07M-222M-50	2.2	0.02	10	70	0.252	5.2	60
07M-272M-50	2.7	0.02	10	70	0.252	5.8	55
07M-332M-50	3.3	0.02	10	100	0.252	6.1	50
07M-392M-50	3.9	0.02	10	100	0.252	7.2	45
07M-472M-50	4.7	0.02	10	100	0.252	7.5	40
07M-562M-50	5.6	0.02	10	100	0.252	8.4	40
07M-682M-50	6.8	0.02	10	70	0.252	9.7	35
07M-822M-50	8.2	0.02	10	70	0.252	10.4	30
07M-832M-50	8.3	0.02	10	70	0.252	10.4	30
07M-103M-50	10	0.02	10	100	0.079	12.1	25
07M-123M-50	12	0.02	10	100	0.079	13	25
07M-153M-50	15	0.02	10	100	0.079	15	25
07M-183M-50	18	0.02	10	100	0.079	17	22
07M-223M-50	22	0.02	10	100	0.079	19.5	21
07M-273M-50	27	0.02	10	100	0.079	22	18
07M-333M-50	33	0.02	10	100	0.079	26	17
07M-393M-50	39	0.02	10	100	0.079	45	15
07M-473M-50	47	0.02	10	100	0.079	52	13
07M-563M-50	56	0.02	10	100	0.079	58	12
07M-683M-50	68	0.02	10	70	0.079	66	12
07M-823M-50	82	0.02	10	70	0.079	71	10
07M-104M-50	100	0.02	10	55	0.03	120	7

Material : Ferrite

SPQ :

Packing Form	Loose / Box
Radial	250 [-50]

All dimensions in mm

Plugable Inductors (shielded)

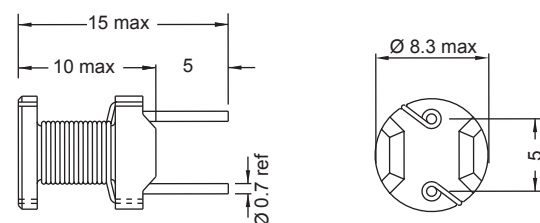




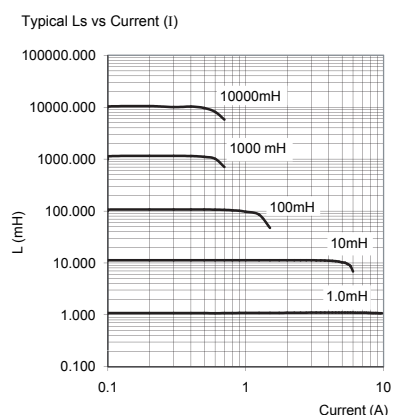
Fine Inductors  
**Fastron**



**07 HCP**  
For High Currents



Part No	Inductance L (µH)	f <sub>L</sub> (kHz)	Tol. ± (%)	DCR max (Ω)	Rated DC Current (A)	I <sub>sat</sub>
07HCP-1R0X-50	1	1 @ 0.25V	20	0.06	7.5	10
07HCP-2R2X-50	2.2	1 @ 0.25V	20	0.01	6	8
07HCP-3R3X-50	3.3	1 @ 0.25V	20	0.013	5	6.3
07HCP-4R7X-50	4.7	1 @ 0.25V	20	0.018	4	5.4
07HCP-6R8X-50	6.8	1 @ 0.25V	20	0.025	3.8	6.5
07HCP-100X-50	10	1 @ 0.25V	20	0.04	2.6	5
07HCP-220X-50	22	1 @ 0.25V	10,20	0.055	2.3	3.6
07HCP-330X-50	33	1 @ 0.25V	10,20	0.1	1.5	2.5
07HCP-470X-50	47	1 @ 0.25V	10,20	0.1	1.3	2.5
07HCP-680X-50	68	1 @ 0.25V	10,20	0.14	1.1	2.1
07HCP-820X-50	82	1 @ 0.25V	10,20	0.16	1	1.9
07HCP-101X-50	100	1 @ 0.25V	10,20	0.19	0.9	1.6
07HCP-121X-50	120	1 @ 0.25V	10,20	0.22	0.85	1
07HCP-221X-50	220	1 @ 0.25V	10,20	0.38	0.64	1.2
07HCP-331X-50	330	1 @ 0.25V	10,20	0.7	0.51	0.95
07HCP-391X-50	390	1 @ 0.25V	10,20	0.89	0.5	0.8
07HCP-471X-50	470	1 @ 0.25V	10,20	0.89	0.43	0.8
07HCP-821X-50	820	1 @ 0.25V	10,20	1.56	0.36	0.7
07HCP-102X-50	1000	1 @ 0.25V	10,20	1.84	0.3	0.5
07HCP-152X-50	1500	1 @ 0.25V	10,20	3.3	0.3	0.3
07HCP-182X-50	1800	1 @ 0.25V	10,20	3.3	0.21	0.35
07HCP-222X-50	2200	1 @ 0.25V	10,20	5.3	0.19	0.25
07HCP-272X-50	2700	1 @ 0.25V	10,20	6.8	0.24	0.17
07HCP-402X-50	4000	1 @ 0.25V	10,20	10.3	0.14	0.22
07HCP-103X-50	10000	1 @ 0.25V	10,20	24	0.14	0.17



All dimensions in mm

Pluggable Inductors

Material : Ferrite

SPQ :	Packing Form	Loose / Box
	Radial	500 [-50]

## Wide Band Chokes and Beads

FASTRON wide band chokes are ferrite beads wound with a thin copper wire. These 6 hole beads provide a constant current. They are commonly use in burner and signal filtering applications and protect against radio frequency interface s of components on PCB's

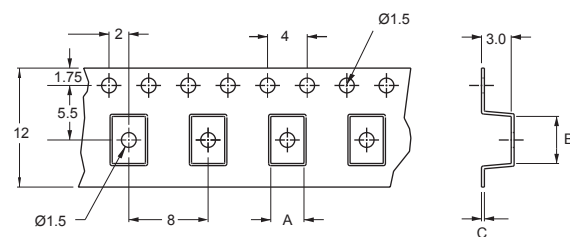
**Applications** To filter external EMI  
Reduction of radiated interference and TV receivers  
Voltage supply for high load currents

Technical Data	
Impedance, Z	Measured with HP 4286A RF LCR meter at frequency f <sub>i</sub>
Operating Temperature	-55°C to +85°C
Recommended soldering method	Wave
Solderability	Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
Resistance to Soldering Heat	Resistant to 260°C ± 5°C for 10 ± 1 seconds Standard: IEC 68-2-20 (Tb)
Resistance to Solvent	Resistant to Isopropyl alcohol for 5 ± 0.5 minutes at 23°C ± 5°C Standard: IEC 68-2-45
Climatic Test	Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: +85°C for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
Thermal Shock Test	Temperature cycle : -55°C to +85°C to -55°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G
Tensile Strength of Leads	Components withstand a pulling force of 10N for 10 ± 1 seconds IEC 60068-2-21 (Ua <sub>1</sub> )
Mechanical Shock	Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

**Ordering Code** Example: **06H-351X-00**      **06H** -      **351**      **X**      -      **00**  
(Model)      (Impedance Value) (Tolerance)      (Packing Code)

Packing Code - 00 (Loose in Box), 01 (Reel), 02 (Ammopack - axial)

### Packing Specification



Type	A	B	C
SMB/001	3.35	4.75	0.29
SMB/002	3.55	9.3	0.27



**06 H**

Fig. 1

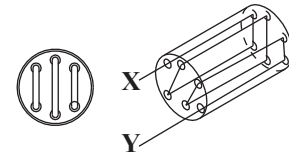
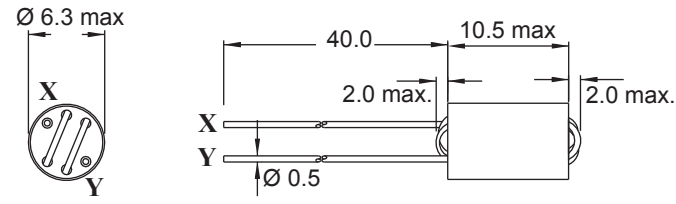


Fig. 2

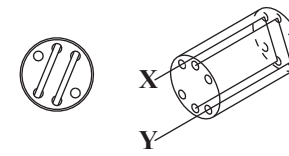
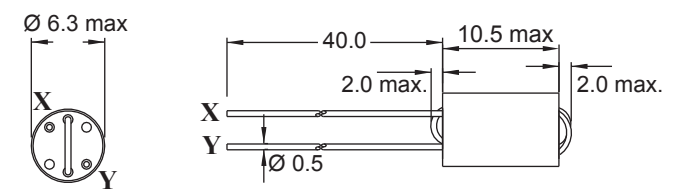


Fig. 3

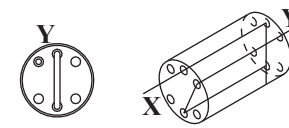
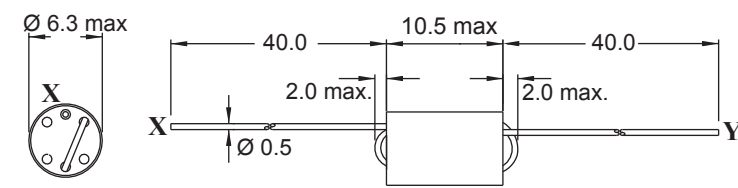


Fig. 4

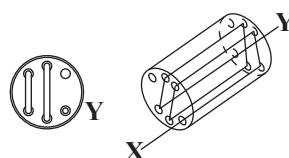
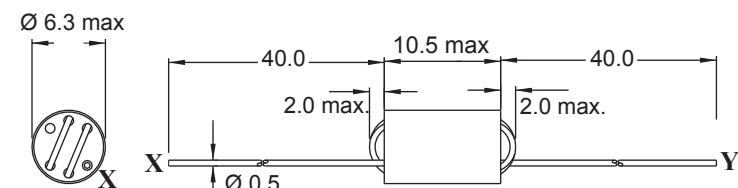
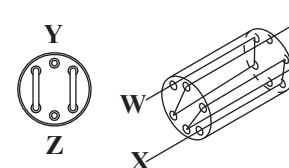
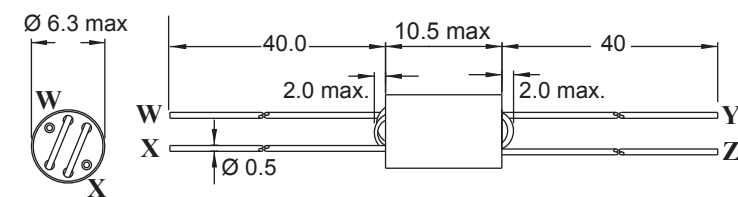


Fig. 5



All dimensions in mm

Wide Band Chokes

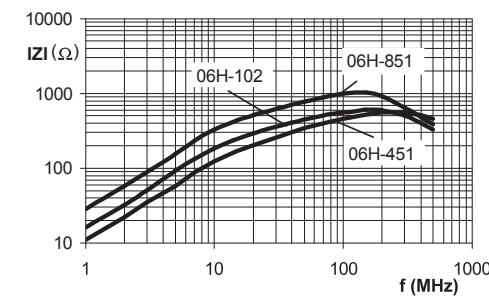
Part No	Impedance		Turns	Current (A)	Fig.
	Z min(Ω)	fz (MHz)			
06H-351X-00	300	120	1½	1.0	3
06H-451X-00	350	250	1½	1.0	3
06H-551X-50	800	50	3	1.0	1
06H-651X-50	520	50	2	1.0	2
06H-751X-00	600	50	2½	1.0	4
06H-851X-00	700	180	2½	1.0	4
06H-901X-00	700	50	2 x 1½	1.0	5
06H-102X-00	800	110	2 x 1½	1.0	5
06H-881X-50	750	180	3	1.0	1

Material : Ferrite

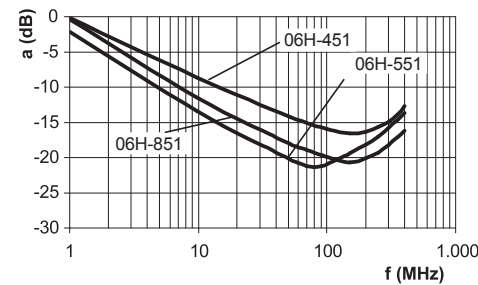
SPQ :	Packing Form	Loose / Box
	Axial	300 [-00] / [-50]

Remark : All models are available with insulation tube (06 H/T)

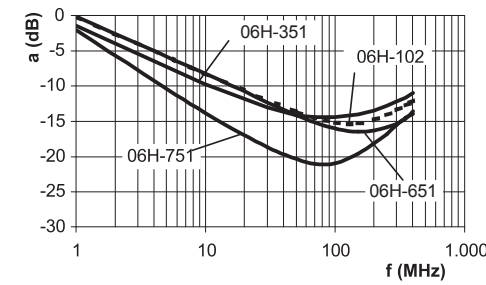
Typical IZI vs Frequency (f)



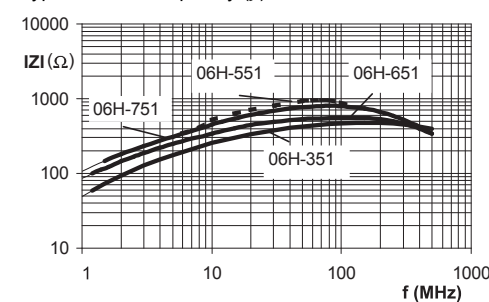
Typical a(dB) vs Frequency (f)



Typical a(dB) vs Frequency (f)

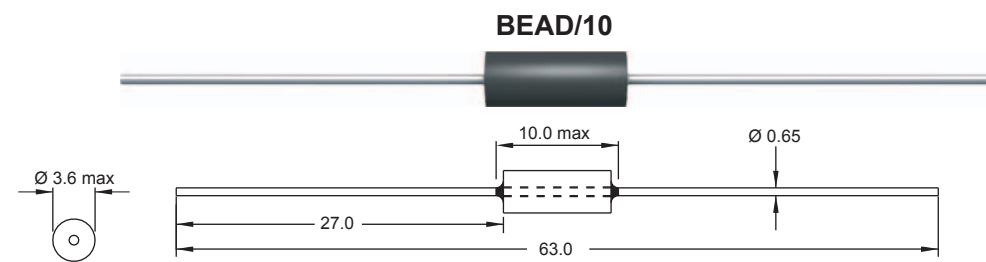
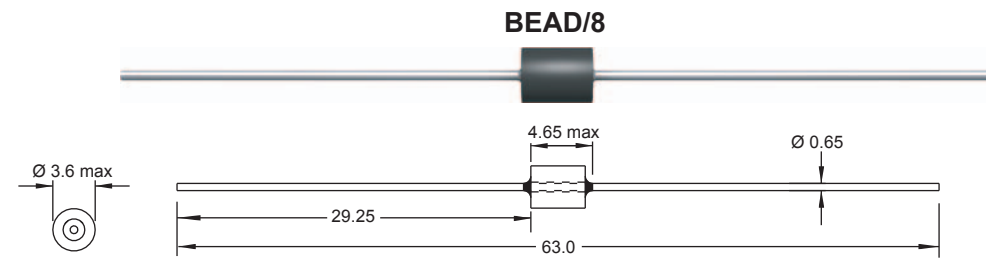
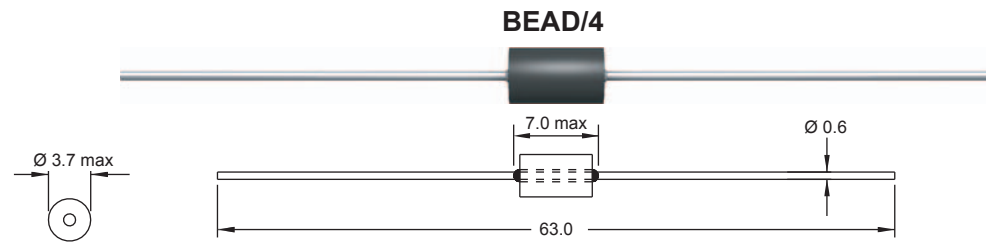


Typical IZI vs Frequency (f)



# LEADED BEADS

EMI Filters

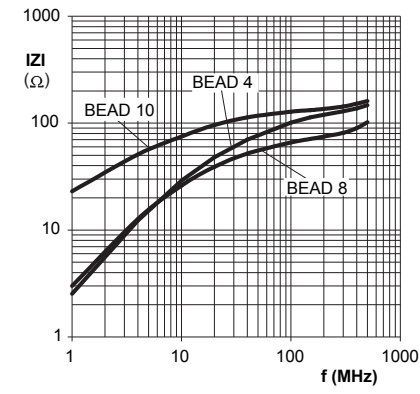


Part No	Impedance Z ( $\Omega$ )
Bead /4-900R-xx	90 $\Omega$ @ 100MHz
Bead /8-210P-xx	21 $\Omega$ @ 10MHz
Bead /10-600P-xx	60 $\Omega$ @ 10MHz

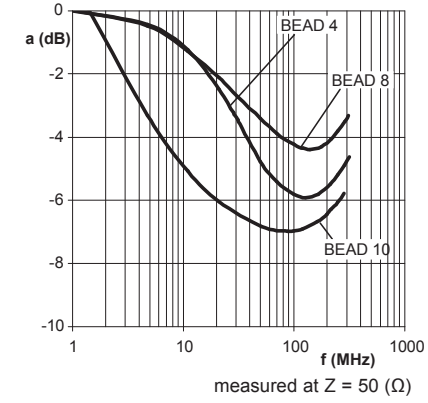
Material : Ferrite

SPQ :	Reel	Taped / Ammopack
	3000 [-01]	1000 [-02]

Typical |Z| vs Frequency (f)



Typical a(dB) vs Frequency (f)



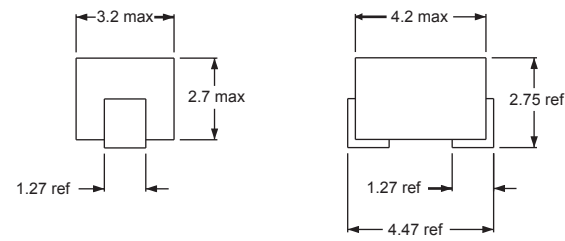
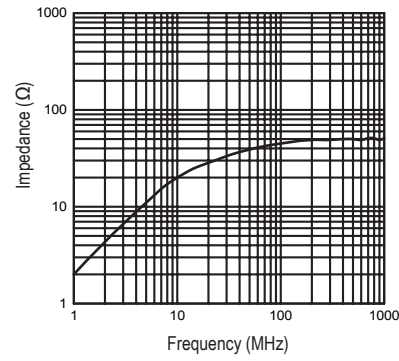
All dimensions in mm

Wide Band Chokes

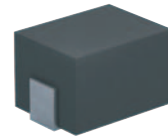


**New** **SMD BEADS**  
Flat Wire For High Currents

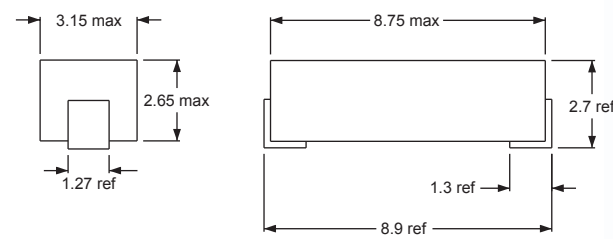
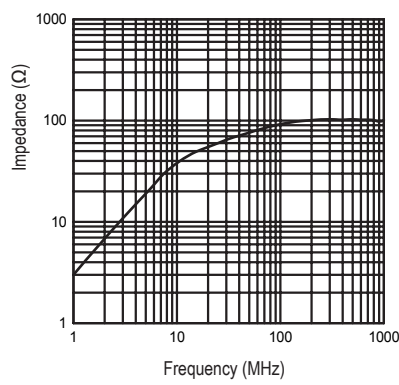
Typical Z vs Frequency



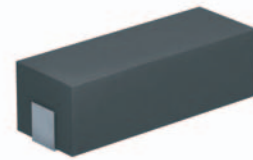
SMB/001



Typical Z vs Frequency



SMB/002



All dimensions in mm

Wide Band Chokes

Part No	Impedance Z (Ω Typ)		DCR max (Ω)	Rated DC Current (A)
	56ΩTyp @ 100MHz	63ΩTyp @ 300MHz		
SMB/001-999X-01	56ΩTyp @ 100MHz	63ΩTyp @ 300MHz	0.01	3
SMB/002-999X-01	100ΩTyp @ 100MHz	112ΩTyp @ 300MHz	0.015	3

Material : Ferrite

SPQ :

Reel
500 [-01]
3000 [-04]



**SMD Power Inductors (also shielded)**

FASTRON power inductors can withstand a wide temperature range. The inductance values range from 1.0  $\mu$ H to 10000  $\mu$ H and they are suitable for high rated currents. They have a high reliability and can be assembled by surface mount technology. Their low DC resistance keeps power losses to a minimum. They are also suitable for Filtering of supply voltages, Coupling, Decoupling, Automotive electronics and Network switching systems.

**Applications** These components are widely used in power supplies for VTR, LCD TV, notebooks, PC and DC/DC converters.

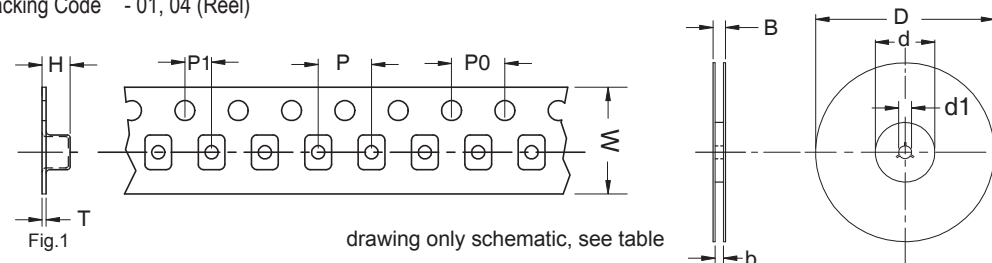
**Technical Data**

L – Value (rated inductance)	Measured with HP 4194A Impedance / Gain-phase Analyzer at frequency $f_l$
SRF (min) – (unshielded only)	Measured with HP 8714 RF Network Analyzer
DCR (max)	Measured at 25°C
Rated DC Current	Isat max. current based on and inductivity drop of 30% (SPISG) respectively 10% (PISL, PISM, PISN, PISR) related to the unloaded inductivity I $\Delta$ T max. current based on temperature rise: determined at the point where the temperature rise does not exceed 30°C (PISG) respectively 40°C (PISL, PISM, PISN, PISR) above the ambient temperature of 25°C I rms : SPISM : Average current for 40°C rise from 25°C ambient I rated current indicates the current when inductivity drop of 25% max related to the unloaded inductivity or when temperature raise $\Delta T=40^\circ\text{C}$ ( $T_a=20^\circ\text{C}$ ) whichever is lower
Operating Temperature	-40°C to +125°C (includes component self-heating)
Recommended soldering method	Reflow
Solderability	Using lead free solder (Sn 99.9) at 260°C $\pm$ 5°C for 5 $\pm$ 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
Resistance to Soldering Heat	Resistant to 260°C $\pm$ 5°C for 10 $\pm$ 1 seconds Standard: IEC 68-2-20 (Tb)
Resistance to Solvent	Resistant to Isopropyl alcohol for 5 $\pm$ 0.5 minutes at 23°C $\pm$ 5°C Standard: IEC 68-2-45
Climatic Test	Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: +125°C for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
Thermal Shock Test	Temperature cycle : -40°C to +125°C to -40°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G
Shear Test	Components withstand a pushing force of 20N for 10 $\pm$ 1 seconds Standard: IEC 60068-2-21, method Ue3
Mechanical Shock	Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

**Ordering Code** Example: **PIS2408-2R9X-04** (Model)(Case Size) - (Inductance Value)(Tolerance) - (Packing Code)

- Case Sizes - 2408, 2416, 2812, 2816, 4716, 4720, 4728, G, L, M, N, R
- Core Type - Ferrite
- Tolerances - M (20%), N (30%)  
- **Bold id standard tolerance**
- Packing Code - 01, 04 (Reel)

**Packing Specification**



Type	D	d	d1	B	b	W	P	P0	P1	H	T
PIS 2408	330	100	13	22.4	16.4	16	12	4	2	3.0	0.35
PIS 2416	330	100	13	22.4	16.4	16	12	4	2	5.1	0.35
PIS 2812	330	100	13	22.4	16.4	16	12	4	2	3.6	0.35
PIS 2816	330	100	13	22.4	16.4	16	12	4	2	4.6	0.4
PIS 4716	330	100	13	30.4	24.4	24	16	4	2	4.8	0.30
PIS 4720	330	100	13	30.4	24.4	24	16	4	2	6.1	0.45
PIS 4728	330	100	13	30.4	24.4	24	16	4	2	8.1	0.45
PISG/SPISG	180	60	13	18.4	12.4	12	8	4	2	3.2	0.25
PISL	330	100	13	30.4	24.4	24	12	4	2	3.6	0.3
PISM/SPISM	330	100	13	30.4	24.4	24	12	4	2	5.4	0.3
PISN	330	100	13	30.4	24.4	24	24	4	2	11.6	0.3
PISR	330	100	13	38.4	32.4	32	24	4	2	7.6	0.3

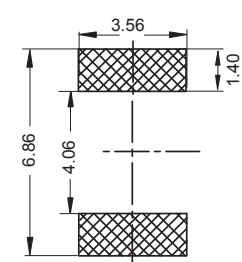
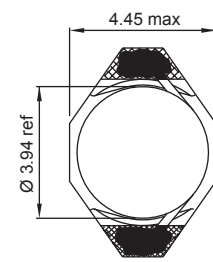
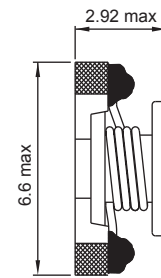
All dimensions in mm

Technical Data & Packing Spec

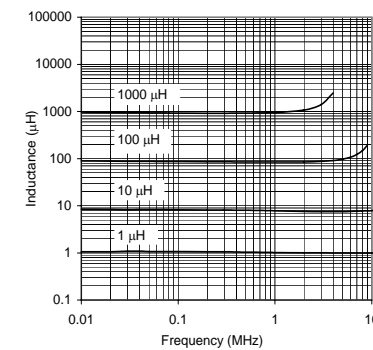


## PISG

Engineer's Kit : EK-PISG



Typical L vs Frequency(f)

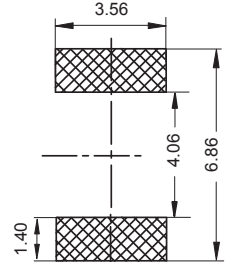
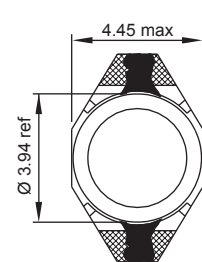
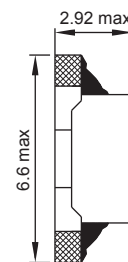


All dimensions in mm

SMD Power Inductors & Shielded

Part No	Inductance L (µH)	f <sub>l</sub> (MHz)	Tol ± (%)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A) I <sub>sat</sub>	Rated DC Current (A) I <sub>ΔT = 30°C</sub>
PISG-1R0M-01	1	0.1	20	130	0.05	2.9	2.9
PISG-1R5M-01	1.5	0.1	20	115	0.06	2.6	2.8
PISG-2R2M-01	2.2	0.1	20	90	0.07	2.3	2.4
PISG-3R3M-01	3.3	0.1	20	70	0.08	2	2
PISG-4R7M-01	4.7	0.1	20	50	0.09	1.5	1.5
PISG-6R8M-01	6.8	0.1	20	45	0.13	1.2	1.4
PISG-100M-01	10	0.1	20	35	0.16	1.1	1.1
PISG-150M-01	15	0.1	20	30	0.23	0.9	1.2
PISG-220M-01	22	0.1	20	20	0.37	0.7	0.8
PISG-270M-01	27	0.1	20	15	0.51	0.65	0.7
PISG-330M-01	33	0.1	20	15	0.51	0.58	0.6
PISG-470M-01	47	0.1	20	14	0.64	0.5	0.5
PISG-560M-01	56	0.1	20	11	0.86	0.4	0.4
PISG-680M-01	68	0.1	20	11	0.86	0.4	0.4
PISG-101M-01	100	0.1	20	9	1	0.4	0.3
PISG-151M-01	150	0.1	20	6	2	0.27	0.25
PISG-221M-01	220	0.1	20	5.5	3.11	0.22	0.2
PISG-331M-01	330	0.1	20	5	3.8	0.18	0.16
PISG-471M-01	470	0.1	20	4	5.06	0.16	0.15
PISG-561M-01	560	0.1	20	3	9	0.15	0.15
PISG-681M-01	680	0.1	20	3	9.2	0.14	0.12
PISG-102M-01	1000	0.1	20	2	13.8	0.1	0.07

Material : Ferrite Remark : I<sub>sat</sub> & I<sub>ΔT</sub> - see description in inductors Technical Data page 58  
 SPQ : Reel 750 [-01]



## (shielded) SPISG

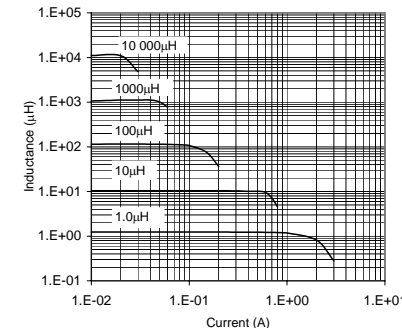
Engineer's Kit : EK-SPISG



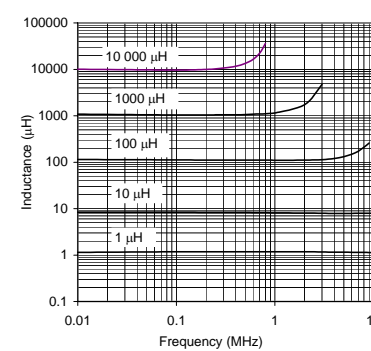
Part No	Inductance L (µH)	f <sub>l</sub> (kHz)	Tol ± (%)	Q min	f <sub>0</sub> (kHz)	SRF typ (MHz)	DCR max (Ω)	Rated DC Current (A) I <sub>sat</sub>
SPISG-1R0M-01	1	100 @ 0.1V	20	30	200	216	0.04	1.4
SPISG-1R5M-01	1.5	100 @ 0.1V	20	30	200	82	0.045	0.93
SPISG-2R2M-01	2.2	100 @ 0.1V	20	40	200	72	0.05	0.92
SPISG-3R3M-01	3.3	100 @ 0.1V	20	40	200	70	0.055	0.75
SPISG-4R7M-01	4.7	100 @ 0.1V	20	40	200	56	0.06	0.58
SPISG-6R8M-01	6.8	100 @ 0.1V	20	40	200	50	0.065	0.58
SPISG-8R2M-01	8.2	100 @ 0.1V	20	40	200	42	0.07	0.47
SPISG-100M-01	10	100 @ 0.1V	20	40	200	38	0.075	0.37
SPISG-150M-01	15	100 @ 0.1V	20	40	100	33	0.09	0.31
SPISG-220M-01	22	100 @ 0.1V	20	40	100	25	0.11	0.3
SPISG-330M-01	33	100 @ 0.1V	20	40	100	20	0.19	0.3
SPISG-470M-01	47	100 @ 0.1V	20	40	100	20	0.23	0.24
SPISG-680M-01	68	100 @ 0.1V	20	40	100	15	0.29	0.17
SPISG-101M-01	100	100 @ 0.1V	20	40	100	10	0.48	0.13
SPISG-151M-01	150	100 @ 0.1V	20	40	100	9	0.59	0.1
SPISG-221M-01	220	100 @ 0.1V	20	40	100	6	0.77	0.1
SPISG-331M-01	330	100 @ 0.1V	20	40	100	5	1.4	0.07
SPISG-471M-01	470	100 @ 0.1V	20	40	100	4	1.8	0.06
SPISG-681M-01	680	100 @ 0.1V	20	40	100	3	2.2	0.055
SPISG-102M-01	1000	100 @ 0.1V	20	40	100	2	3.4	0.045
SPISG-152M-01	1500	100 @ 0.1V	20	50	100	2	4.2	0.035
SPISG-222M-01	2200	100 @ 0.1V	20	50	100	2	8.5	0.028
SPISG-332M-01	3300	100 @ 0.1V	20	50	100	1	11	0.024
SPISG-472M-01	4700	100 @ 0.1V	20	50	100	1	13.9	0.021
SPISG-682M-01	6800	100 @ 0.1V	20	50	100	1	25	0.019
SPISG-103M-01	10000	100 @ 0.1V	20	50	100	0.8	32.8	0.017

Material : Ferrite Remark : I<sub>sat</sub> - see description in inductors Technical Data page 58  
 SPQ : Reel 750 [-01]

Typical L vs Current

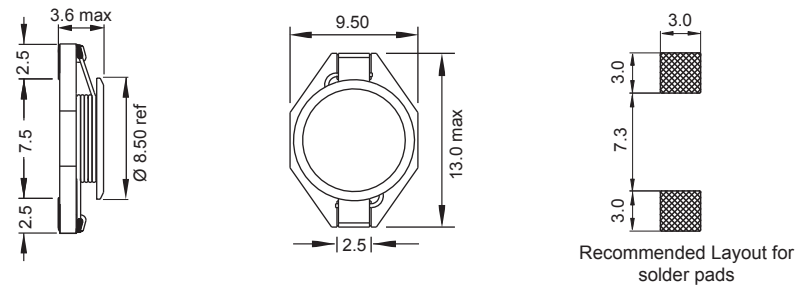


Typical L vs Frequency(f)



**PISL**

Engineer's Kit : EK-PISL

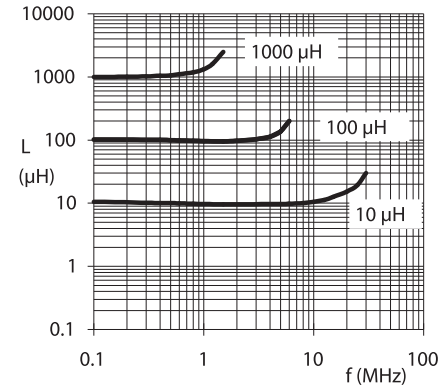


Part No	Inductance L (µH)	f <sub>L</sub> (MHz)	Tol ± (%)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)	
						I <sub>sat</sub>	I <sub>ΔT = 40°C</sub>
PISL-100M-04	10	0.1	20	37	0.06	2.50	2.2
PISL-150M-04	15	0.1	20	24	0.07	2.10	1.7
PISL-220M-04	22	0.1	20	19	0.10	1.70	1.4
PISL-330M-04	33	0.1	20	15	0.16	1.40	1.2
PISL-470M-04	47	0.1	20	12	0.22	1.10	0.9
PISL-680M-04	68	0.1	20	10	0.33	0.90	0.8
PISL-101M-04	100	0.1	20	8	0.46	0.75	0.7
PISL-151M-04	150	0.1	20	5.5	0.69	0.60	0.55
PISL-221M-04	220	0.1	20	4.9	1.0	0.50	0.45
PISL-331M-04	330	0.1	20	3.5	1.5	0.40	0.35
PISL-471M-04	470	0.1	20	3	2.0	0.35	0.30
PISL-681M-04	680	0.1	20	2.3	2.8	0.25	0.25
PISL-102M-04	1000	0.1	20	1.8	3.9	0.20	0.100
PISL-222M-04	2200	0.1	20	1.8	10	0.12	0.100
PISL-682M-04	6800	0.1	20	1.5	30	0.05	0.045

Material : Ferrite  
SPQ : Reel 1500 [-04]

Remark : I<sub>sat</sub> & I<sub>ΔT</sub> - see description in Inductors Technical Data page 58

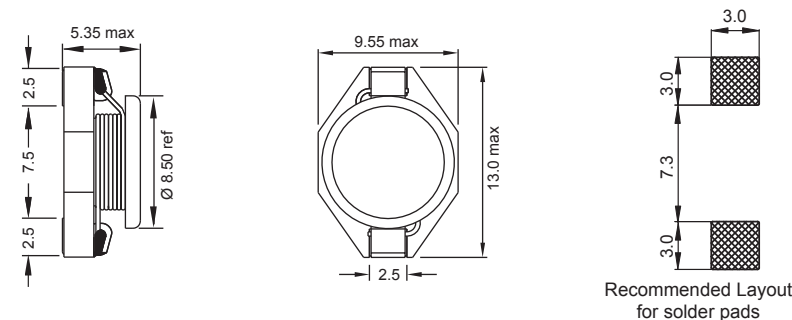
Typical L vs Frequency (f)



All dimensions in mm

**PISM**

Engineer's Kit : EK-PISM

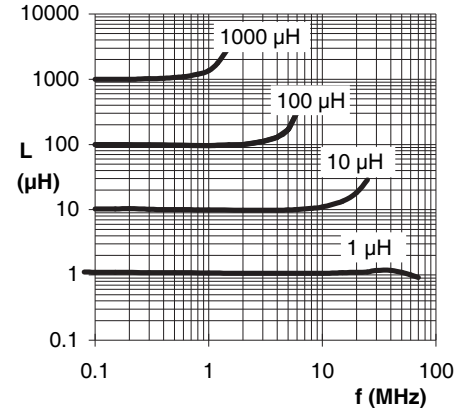


Part No	Inductance L (µH)	f <sub>L</sub> (MHz)	Tol ± (%)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)	
						I <sub>sat</sub>	I <sub>ΔT = 40°C</sub>
PISM-1R0M-04	1	0.1	20	115	0.008	10	6.9
PISM-1R5M-04	1.5	0.1	20	90	0.009	9	6.5
PISM-2R2M-04	2.2	0.1	20	80	0.01	8	6.2
PISM-3R3M-04	3.3	0.1	20	58	0.014	7	5.5
PISM-4R7M-04	4.7	0.1	20	49	0.017	6	4.9
PISM-6R8M-04	6.8	0.1	20	39	0.022	5.1	4.4
PISM-100M-04	10	0.1	20	28	0.036	4.2	3.9
PISM-150M-04	15	0.1	20	22	0.05	3.2	3.2
PISM-220M-04	22	0.1	20	17	0.06	2.7	2.7
PISM-330M-04	33	0.1	20	13	0.1	2.1	2.1
PISM-470M-04	47	0.1	20	10	0.14	1.7	1.7
PISM-680M-04	68	0.1	20	8.5	0.19	1.5	1.5
PISM-101M-04	100	0.1	20	7	0.28	1.2	1.2
PISM-151M-04	150	0.1	20	5.3	0.42	1	1
PISM-221M-04	220	0.1	20	4.1	0.6	0.85	0.85
PISM-331M-04	330	0.1	20	3.2	0.9	0.65	0.65
PISM-471M-04	470	0.1	20	2.8	1.25	0.55	0.55
PISM-681M-04	680	0.1	20	2.3	2	0.45	0.45
PISM-102M-04	1000	0.1	20	1.7	2.7	0.35	0.35
PISM-222M-04	2200	0.1	20	1.4	7	0.25	0.22

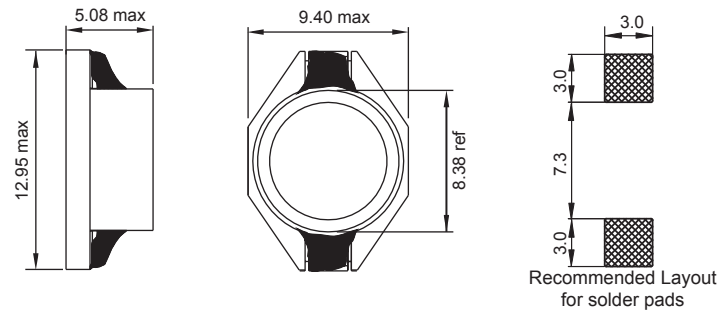
Material : Ferrite  
SPQ : Reel 1000 [-04]

Remark : I<sub>sat</sub> & I<sub>ΔT</sub> - see description in Inductors Technical Data page 58

Typical L vs Frequency (f)



SMD Power Inductors



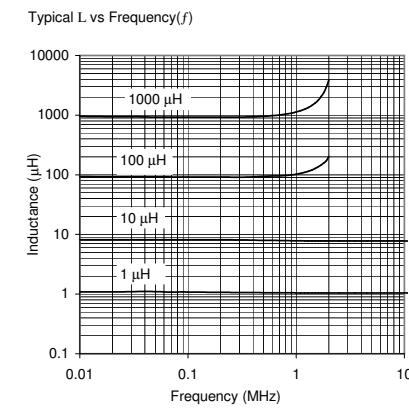
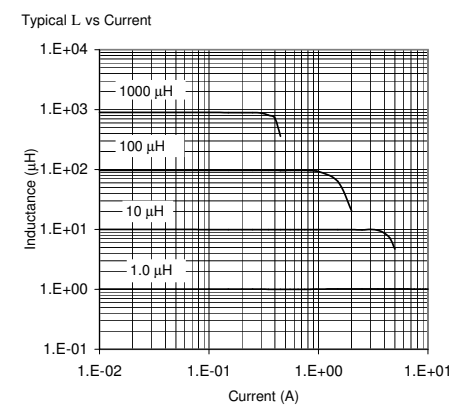
Recommended Layout for solder pads

Part No	Inductance L (μH)	f <sub>L</sub> (kHz)	ToI ± (%)	SRF typ (MHz)	DCR max (Ω)	Rated DC Current (A)	
						I <sub>sat</sub>	I <sub>rms</sub>
SPISM-1R0M-04	1	100 @ 0.1V	20	100	0.021	5.6	5
SPISM-1R5M-04	1.5	100 @ 0.1V	20	89	0.022	5.2	4.5
SPISM-2R2M-04	2.2	100 @ 0.1V	20	71	0.032	5	3.8
SPISM-3R3M-04	3.3	100 @ 0.1V	20	57	0.039	3.9	3.3
SPISM-4R7M-04	4.7	100 @ 0.1V	20	40	0.054	3.2	2.7
SPISM-6R8M-04	6.8	100 @ 0.1V	20	38	0.075	2.8	2.2
SPISM-8R2M-04	8.2	100 @ 0.1V	20	36	0.085	2.6	2.1
SPISM-100M-04	10	100 @ 0.1V	20	32	0.101	2.4	2
SPISM-150M-04	15	100 @ 0.1V	20	25	0.15	2	1.5
SPISM-220M-04	22	100 @ 0.1V	20	17	0.207	1.6	1.3
SPISM-330M-04	33	100 @ 0.1V	20	14	0.334	1.4	1.1
SPISM-470M-04	47	100 @ 0.1V	20	12	0.472	1	0.8
SPISM-680M-04	68	100 @ 0.1V	20	9	0.66	0.9	0.7
SPISM-101M-04	100	100 @ 0.1V	20	6	1.11	0.8	0.6
SPISM-151M-04	150	100 @ 0.1V	20	6	1.55	0.6	0.5
SPISM-221M-04	220	100 @ 0.1V	20	4	2	0.5	0.37
SPISM-471M-04	470	100 @ 0.1V	20	2	5	0.4	0.19
SPISM-102M-04	1000	100 @ 0.1V	20	2	8.3	0.32	0.17

Material : Ferrite  
SPQ : Reel 1000 [-04]

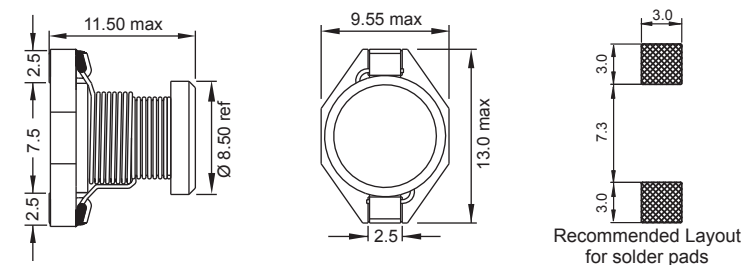
Remark : I<sub>sat</sub> - see description in Inductors Technical Data page 58

(shielded) **SPISM**  
Engineer's Kit : EK-SPISM



All dimensions in mm

SMD Power Inductors



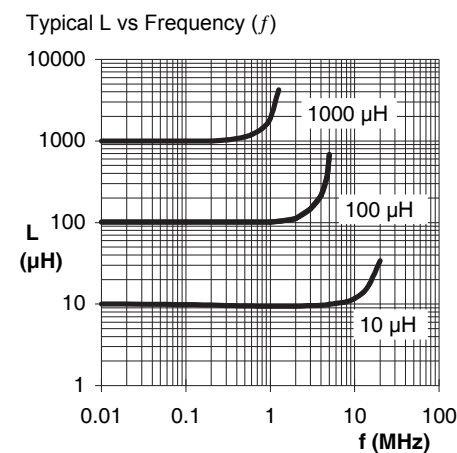
Recommended Layout for solder pads

Part No	Inductance L (μH)	f <sub>L</sub> (MHz)	ToI ± (%)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)	
						I <sub>sat</sub>	I <sub>ΔT = 40°C</sub>
PISN-100M-04	10	0.1	20	19	0.024	8.3	4.9
PISN-150M-04	15	0.1	20	15	0.035	7.1	4.2
PISN-220M-04	22	0.1	20	12	0.05	5.6	3.5
PISN-330M-04	33	0.1	20	11	0.065	4.3	3.1
PISN-470M-04	47	0.1	20	8	0.095	3.8	2.7
PISN-680M-04	68	0.1	20	6	0.14	3.1	1.9
PISN-101M-04	100	0.1	20	5	0.21	2.6	1.5
PISN-151M-04	150	0.1	20	3.6	0.3	2.1	1.2
PISN-221M-04	220	0.1	20	2.8	0.39	1.7	1.1
PISN-331M-04	330	0.1	20	2.3	0.65	1.35	0.8
PISN-471M-04	470	0.1	20	1.7	0.95	1.15	0.6
PISN-681M-04	680	0.1	20	1.5	1.2	1.05	0.5
PISN-102M-04	1000	0.1	20	1.2	2	0.85	0.2

Material : Ferrite  
SPQ : Reel 350 [-04]

Remark : I<sub>sat</sub> & I<sub>ΔT</sub> - see description in Inductors Technical Data page 58

**PISN**  
Engineer's Kit : EK-PISN





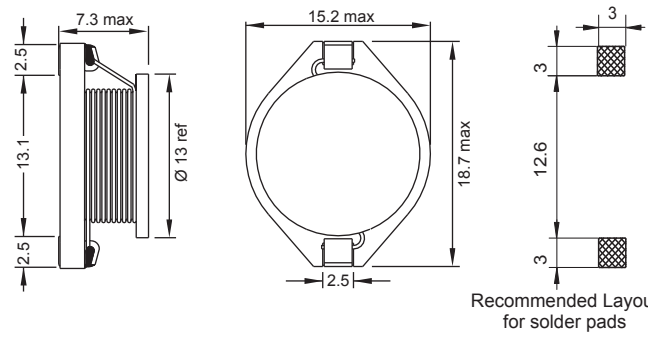
# PISR

Engineer's Kit : EK-PISR



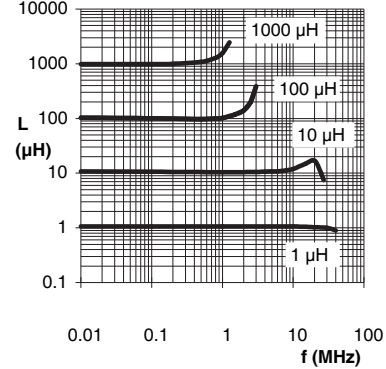
All dimensions in mm

SMD Power Inductors



Recommended Layout for solder pads

Typical L vs Frequency (f)

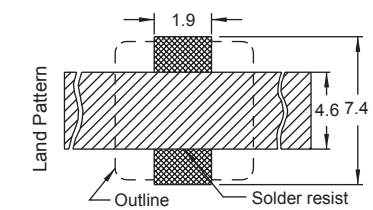
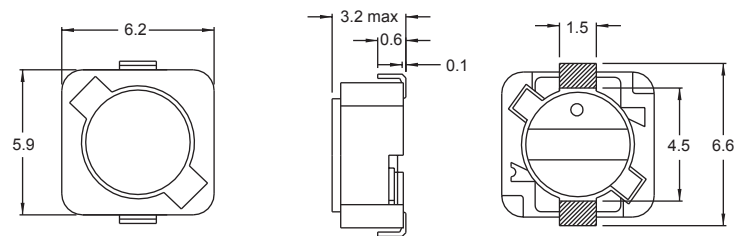
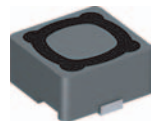


Part No	Inductance L (µH)	f <sub>l</sub> (MHz)	Tol ± (%)	SRF min (MHz)	DCR max (Ω)	Rated DC Current (A)	
						I <sub>sat</sub>	I <sub>ΔT=40°C</sub>
PISR-1R0M-04	1	0.1	20	164	0.009	21	8.6
PISR-1R5M-04	1.5	0.1	20	160	0.007	-	7.4
PISR-2R2M-04	2.2	0.1	20	95	0.014	14	7.1
PISR-3R3M-04	3.3	0.1	20	72	0.017	15	6.4
PISR-4R7M-04	4.7	0.1	20	70	0.02	-	5.5
PISR-5R6M-04	5.6	0.1	20	41	0.022	12	5.5
PISR-6R8M-04	6.8	0.1	20	35	0.029	-	4.7
PISR-100M-04	10	0.1	20	24	0.029	10	4.5
PISR-150M-04	15	0.1	20	20	0.035	8	4.1
PISR-220M-04	22	0.1	20	15	0.04	7	3.6
PISR-330M-04	33	0.1	20	10	0.06	5.6	3.1
PISR-470M-04	47	0.1	20	8	0.07	4.6	2.7
PISR-680M-04	68	0.1	20	6.5	0.1	3.6	2.3
PISR-820M-04	82	0.1	20	6	0.15	3.1	1.9
PISR-101M-04	100	0.1	20	5.2	0.17	3.1	1.9
PISR-151M-04	150	0.1	20	4.2	0.22	2.6	1.6
PISR-221M-04	220	0.1	20	3.3	0.34	2.2	1.3
PISR-271M-04	270	0.1	20	3	0.52	1.9	1.1
PISR-331M-04	330	0.1	20	2.7	0.52	1.9	1.1
PISR-471M-04	470	0.1	20	2.1	0.76	1.4	0.85
PISR-681M-04	680	0.1	20	1.8	1.1	1.2	0.74
PISR-102M-04	1000	0.1	20	1.3	1.7	1	0.57

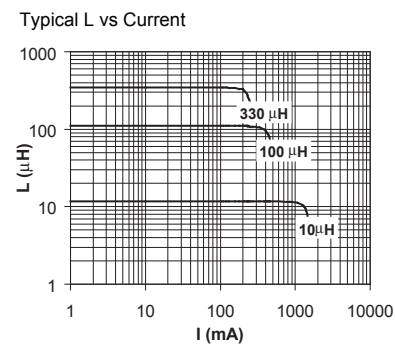
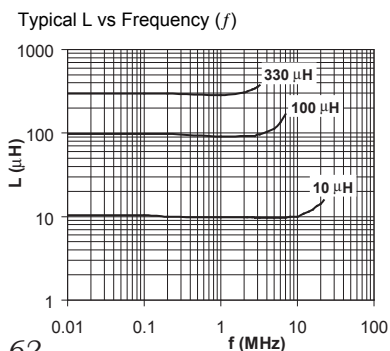
Material : Ferrite  
SPQ : Reel 350 [-04]

Remark : I<sub>sat</sub> & I<sub>ΔT</sub> - see description in Inductors Technical Data page 58

# PIS 2408



\* In order to prevent short circuit, a solder resist is recommended

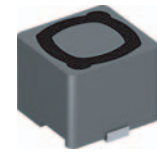


Part No	Inductance L (µH)	f <sub>l</sub> (kHz)	Tol ± (%)	DCR max (Ω)	Rated DC Current I <sub>sat</sub> (A)
PIS2408-2R9N-04	2.9	1	30	0.068	1.94
PIS2408-3R3N-04	3.3	1	30	0.068	1.8
PIS2408-5R5N-04	5.5	1	30	0.096	1.4
PIS2408-6R3N-04	6.3	1	30	0.1	1.3
PIS2408-6R8N-04	6.8	1	30	0.11	1.2
PIS2408-7R1N-04	7.1	1	30	0.11	1.22
PIS2408-8R0N-04	8	1	30	0.12	1.15
PIS2408-100M-04	10	1	20	0.15	1.1
PIS2408-120M-04	12	1	20	0.2	1
PIS2408-150M-04	15	1	20	0.23	0.9
PIS2408-220M-04	22	1	20	0.34	0.74
PIS2408-270M-04	27	1	20	0.38	0.66
PIS2408-470M-04	47	1	20	0.69	0.5
PIS2408-560M-04	56	1	20	0.78	0.46
PIS2408-680M-04	68	1	20	1.07	0.42
PIS2408-820M-04	82	1	20	1.21	0.38
PIS2408-101M-04	100	1	20	1.39	0.34
PIS2408-121M-04	120	1	20	1.9	0.31
PIS2408-151M-04	150	1	20	2.18	0.28
PIS2408-221M-04	220	1	20	3.12	0.23
PIS2408-271M-04	270	1	20	4.38	0.22
PIS2408-331M-04	330	1	20	4.94	0.19

Material : Ferrite  
SPQ : Reel 1200 [-04]

Remark : I<sub>sat</sub> - see description in Inductors Technical Data page 58

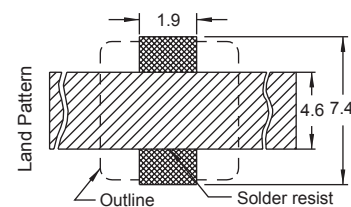
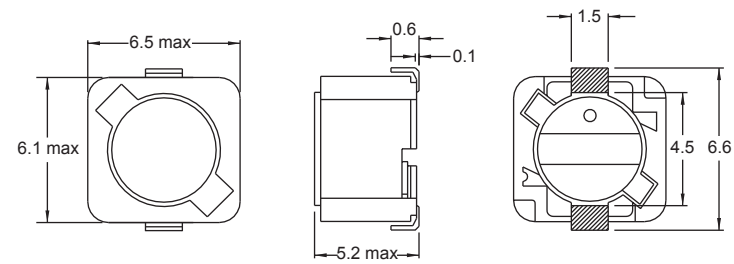




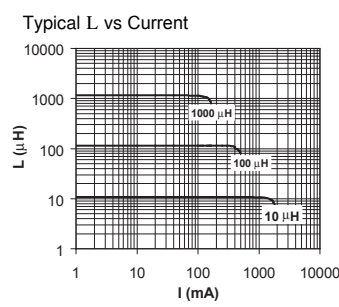
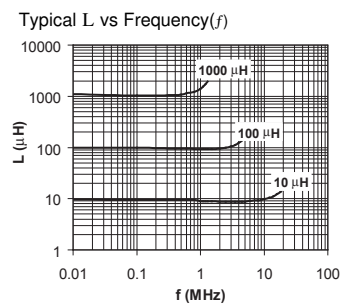
## PIS 2416

Part No	Inductance L (μH)	f <sub>L</sub> (kHz)	Tol ± (%)	DCR max (Ω)	Rated DC Current I (A)
PIS2416-100M-04	10	1	20	0.12	1.35
PIS2416-120M-04	12	1	20	0.13	1.2
PIS2416-150M-04	15	1	20	0.18	1.1
PIS2416-180M-04	18	1	20	0.24	1
PIS2416-220M-04	22	1	20	0.27	0.91
PIS2416-270M-04	27	1	20	0.3	0.82
PIS2416-330M-04	33	1	20	0.33	0.75
PIS2416-390M-04	39	1	20	0.37	0.69
PIS2416-470M-04	47	1	20	0.52	0.62
PIS2416-560M-04	56	1	20	0.56	0.58
PIS2416-680M-04	68	1	20	0.63	0.52
PIS2416-820M-04	82	1	20	0.71	0.47
PIS2416-101M-04	100	1	20	1.03	0.43
PIS2416-121M-04	120	1	20	1.15	0.39
PIS2416-151M-04	150	1	20	1.68	0.35
PIS2416-181M-04	180	1	20	1.87	0.32
PIS2416-221M-04	220	1	20	2.08	0.29
PIS2416-271M-04	270	1	20	2.37	0.26
PIS2416-331M-04	330	1	20	2.67	0.23
PIS2416-391M-04	390	1	20	2.94	0.22
PIS2416-471M-04	470	1	20	3.93	0.2
PIS2416-561M-04	560	1	20	5.43	0.18
PIS2416-681M-04	680	1	20	7.32	0.17
PIS2416-821M-04	820	1	20	8.24	0.15
PIS2416-102M-04	1000	1	20	9.26	0.14

**Material :** Ferrite  
**SPQ :** Reel 1000 [-04]  
**Remark :** I - see description in Inductors Technical Data page 58



\* In order to prevent short circuit, a solder resist is recommended

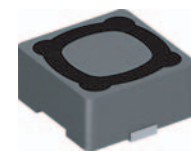


All dimensions in mm

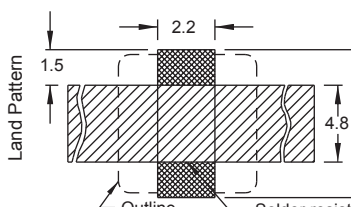
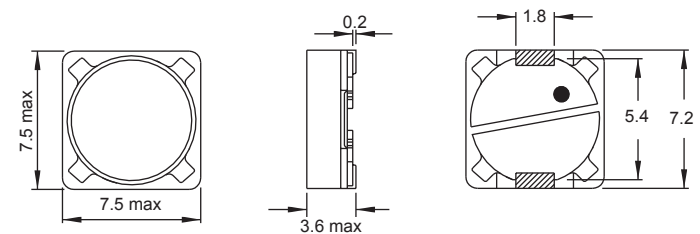
SMD Power Inductors Shielded

Part No	Inductance L (μH)	f <sub>L</sub> (kHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current I (A)
PIS2812-1R0M-04	1	1	20	50	5
PIS2812-3R3M-04	3.3	1	20	70	3
PIS2812-5R6M-04	5.6	1	20	82	2.57
PIS2812-100M-04	10	1	20	80	1.68
PIS2812-120M-04	12	1	20	98	1.52
PIS2812-150M-04	15	1	20	130	1.33
PIS2812-180M-04	18	1	20	140	1.2
PIS2812-220M-04	22	1	20	190	1.07
PIS2812-270M-04	27	1	20	210	0.96
PIS2812-330M-04	33	1	20	240	0.91
PIS2812-390M-04	39	1	20	320	0.77
PIS2812-470M-04	47	1	20	360	0.76
PIS2812-560M-04	56	1	20	470	0.68
PIS2812-680M-04	68	1	20	520	0.61
PIS2812-820M-04	82	1	20	690	0.57
PIS2812-101M-04	100	1	20	790	0.5
PIS2812-121M-04	120	1	20	890	0.49
PIS2812-151M-04	150	1	20	1270	0.43
PIS2812-181M-04	180	1	20	1450	0.39
PIS2812-221M-04	220	1	20	1650	0.35
PIS2812-271M-04	270	1	20	2310	0.32
PIS2812-331M-04	330	1	20	2620	0.28
PIS2812-391M-04	390	1	20	2940	0.26
PIS2812-471M-04	470	1	20	4180	0.24
PIS2812-561M-04	560	1	20	4670	0.22
PIS2812-681M-04	680	1	20	5730	0.19
PIS2812-821M-04	820	1	20	6540	0.18
PIS2812-102M-04	1000	1	20	9440	0.16

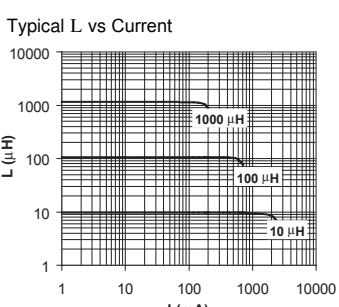
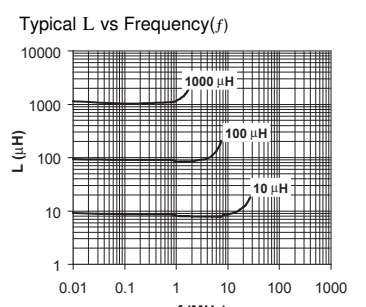
**Material :** Ferrite  
**SPQ :** Reel 1200 [-04]  
**Remark :** I - see description in Inductors Technical Data page 58



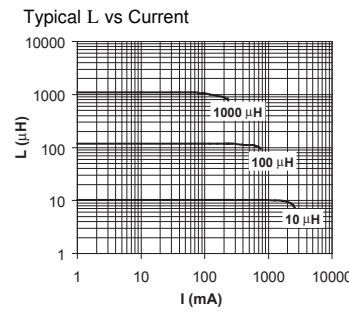
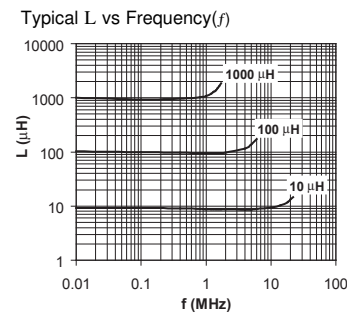
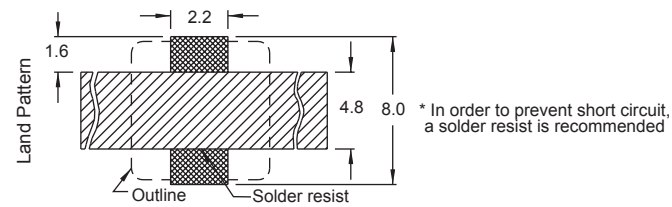
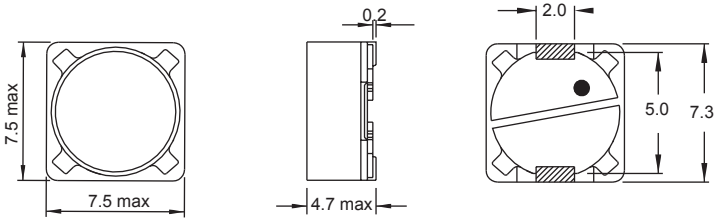
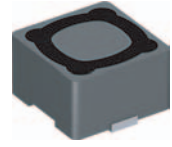
## PIS 2812



\* In order to prevent short circuit, a solder resist is recommended



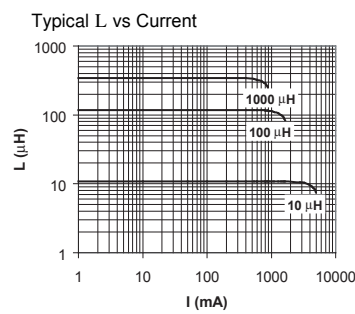
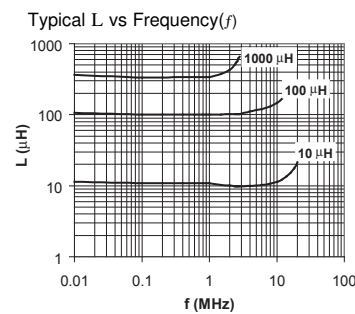
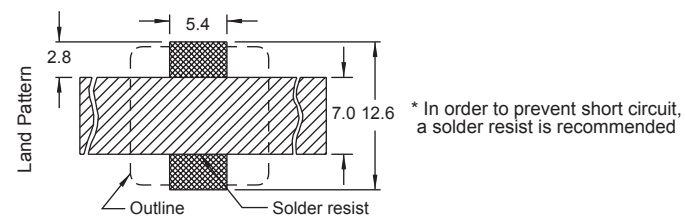
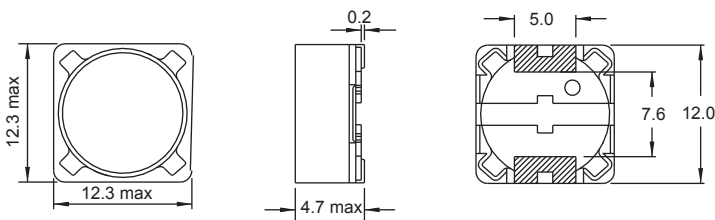
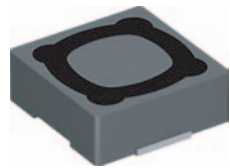
## PIS 2816



Part No	Inductance L (µH)	f <sub>L</sub> (kHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current I (A)
PIS2816-2R2M-04	2.2	1	20	45	2.2
PIS2816-3R3M-04	3.3	1	20	45	2
PIS2816-100M-04	10	1	20	52	1.84
PIS2816-120M-04	12	1	20	58	1.71
PIS2816-150M-04	15	1	20	81	1.47
PIS2816-180M-04	18	1	20	91	1.31
PIS2816-220M-04	22	1	20	110	1.23
PIS2816-270M-04	27	1	20	150	1.12
PIS2816-330M-04	33	1	20	170	0.96
PIS2816-390M-04	39	1	20	230	0.91
PIS2816-470M-04	47	1	20	260	0.88
PIS2816-560M-04	56	1	20	350	0.75
PIS2816-680M-04	68	1	20	380	0.69
PIS2816-820M-04	82	1	20	430	0.61
PIS2816-101M-04	100	1	20	610	0.6
PIS2816-121M-04	120	1	20	660	0.52
PIS2816-151M-04	150	1	20	880	0.46
PIS2816-181M-04	180	1	20	980	0.42
PIS2816-221M-04	220	1	20	1170	0.36
PIS2816-271M-04	270	1	20	1640	0.34
PIS2816-331M-04	330	1	20	1860	0.32
PIS2816-391M-04	390	1	20	2850	0.29
PIS2816-471M-04	470	1	20	3010	0.26
PIS2816-561M-04	560	1	20	3620	0.23
PIS2816-681M-04	680	1	20	4630	0.22
PIS2816-821M-04	820	1	20	5200	0.2
PIS2816-102M-04	1000	1	20	6000	0.18

Material : Ferrite      Remark : I - see description in Inductors Technical Data page 58  
 SPQ : Reel 1000 [-04]

## PIS 4716



Part No	Inductance L (µH)	f <sub>L</sub> (kHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current I (A)
PIS4716-3R3M-04	3.3	100	20	15	7
PIS4716-3R9M-04	3.9	100	20	15	6.5
PIS4716-4R7M-04	4.7	100	20	18	5.7
PIS4716-5R6M-04	5.6	100	20	30	5.7
PIS4716-6R8M-04	6.8	100	20	23	4.9
PIS4716-8R2M-04	8.2	100	20	26	4.6
PIS4716-100M-04	10	100	20	28	4.5
PIS4716-120M-04	12	100	20	38	4
PIS4716-150M-04	15	100	20	50	3.2
PIS4716-180M-04	18	100	20	57	3.1
PIS4716-220M-04	22	100	20	66	2.9
PIS4716-270M-04	27	100	20	80	2.8
PIS4716-330M-04	33	100	20	97	2.7
PIS4716-390M-04	39	100	20	132	2.1
PIS4716-470M-04	47	100	20	150	1.9
PIS4716-560M-04	56	100	20	190	1.8
PIS4716-680M-04	68	100	20	220	1.5
PIS4716-820M-04	82	100	20	260	1.3
PIS4716-101M-04	100	100	20	308	1.2
PIS4716-121M-04	120	100	20	380	1.1
PIS4716-151M-04	150	100	20	530	0.95
PIS4716-181M-04	180	100	20	620	0.85
PIS4716-221M-04	220	100	20	700	0.8
PIS4716-271M-04	270	100	20	876	0.6
PIS4716-331M-04	330	100	20	990	0.5

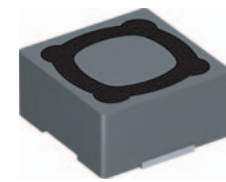
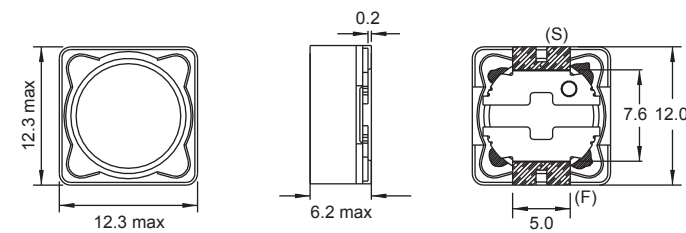
Material : Ferrite      Remark : I - see description in Inductors Technical Data page 58  
 SPQ : Reel 700 [-04]

All dimensions in mm

SMD Power Inductors Shielded



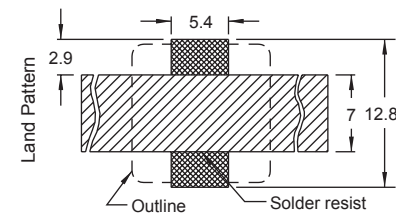
# PIS 4720



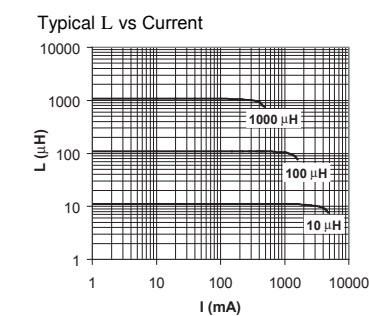
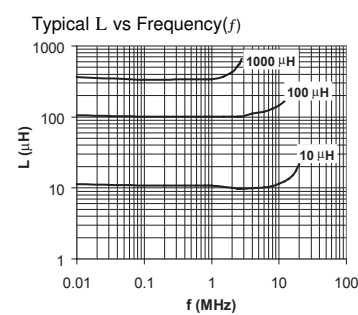
Part No	Inductance L (μH)	f <sub>L</sub> (kHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current I (A)
PIS4720-1R3N-04	1.3	7960	30	12	8
PIS4720-2R1N-04	2.1	7960	30	14	7
PIS4720-3R1N-04	3.1	7960	30	17	5
PIS4720-4R4N-04	4.4	7960	30	20	5
PIS4720-5R8N-04	5.8	7960	30	21	4.4
PIS4720-6R8N-04	6.8	7960	30	30	4.2
PIS4720-7R5N-04	7.5	7960	30	24	4.2
PIS4720-100M-04	10	1	20,30	25	4
PIS4720-120M-04	12	1	20,30	27	3.5
PIS4720-150M-04	15	1	20,30	30	3.3
PIS4720-180M-04	18	1	20,30	34	3
PIS4720-220M-04	22	1	20,30	36	2.8
PIS4720-270M-04	27	1	20,30	51	2.3
PIS4720-330M-04	33	1	20,30	57	2.1
PIS4720-390M-04	39	1	20,30	68	2
PIS4720-470M-04	47	1	20,30	75	1.8
PIS4720-560M-04	56	1	20,30	110	1.7
PIS4720-680M-04	68	1	20,30	120	1.5
PIS4720-820M-04	82	1	20,30	140	1.4
PIS4720-101M-04	100	1	20,30	160	1.3
PIS4720-121M-04	120	1	20,30	170	1.1
PIS4720-151M-04	150	1	20,30	230	1
PIS4720-181M-04	180	1	20,30	290	0.9
PIS4720-221M-04	220	1	20,30	400	0.8
PIS4720-271M-04	270	1	20,30	460	0.75
PIS4720-331M-04	330	1	20,30	510	0.68
PIS4720-391M-04	390	1	20,30	690	0.65
PIS4720-471M-04	470	1	20,30	770	0.58
PIS4720-561M-04	560	1	20,30	860	0.54
PIS4720-681M-04	680	1	20,30	1200	0.48
PIS4720-821M-04	820	1	20,30	1340	0.43
PIS4720-102M-04	1000	1	20,30	1530	0.4

Material : Ferrite  
 SPQ : Reel 500 [-04]

Remark : I - see description in Inductors Technical Data page 58



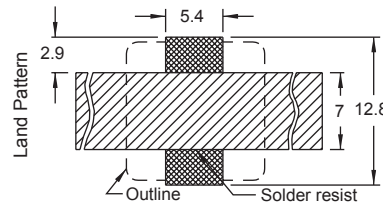
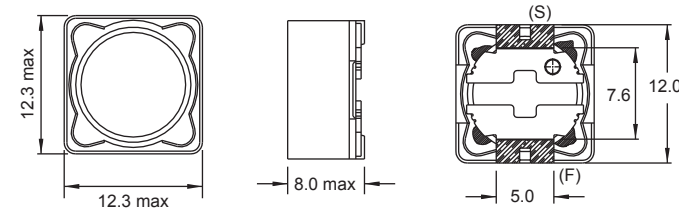
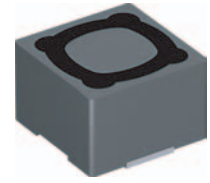
\* In order to prevent short circuit, a solder resist is recommended



All dimensions in mm

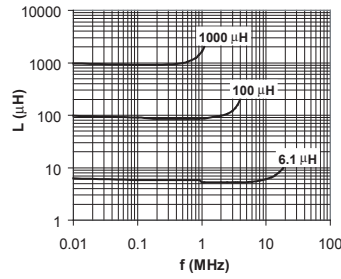
SMD Power Inductors & Shielded

# PIS 4728

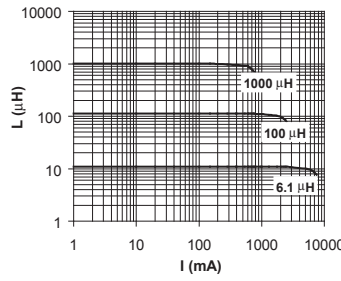


\* In order to prevent short circuit, a solder resist is recommended

Typical L vs Frequency (f)



Typical L vs Current



Part No	Inductance L (µH)	f <sub>L</sub> (kHz)	Tol ± (%)	DCR max (mΩ)	Rated DC Current I (A)
PIS4728-1R2N-04	1.2	100	30	7	9.8
PIS4728-2R4N-04	2.4	100	30	11.5	8
PIS4728-3R5N-04	3.5	100	30	13.5	7.5
PIS4728-4R7N-04	4.7	100	30	15.8	6.8
PIS4728-5R6N-04	5.6	100	30	15.8	6.7
PIS4728-6R1N-04	6.1	100	30	17.6	6.6
PIS4728-7R6N-04	7.6	100	30	20	5.9
PIS4728-100M-04	10	1	20	21.6	5.4
PIS4728-120M-04	12	1	20	24.3	4.9
PIS4728-150M-04	15	1	20	27	4.5
PIS4728-180M-04	18	1	20	39.2	3.9
PIS4728-220M-04	22	1	20	43.2	3.6
PIS4728-270M-04	27	1	20	45.9	3.4
PIS4728-330M-04	33	1	20	64.8	3
PIS4728-390M-04	39	1	20	72.9	2.75
PIS4728-470M-04	47	1	20	100	2.5
PIS4728-560M-04	56	1	20	110	2.35
PIS4728-680M-04	68	1	20	140	2.1
PIS4728-820M-04	82	1	20	160	1.95
PIS4728-101M-04	100	1	20	220	1.7
PIS4728-121M-04	120	1	20	250	1.6
PIS4728-151M-04	150	1	20	280	1.42
PIS4728-181M-04	180	1	20	350	1.3
PIS4728-221M-04	220	1	20	390	1.6
PIS4728-271M-04	270	1	20	560	1.06
PIS4728-331M-04	330	1	20	640	0.95
PIS4728-391M-04	390	1	20	700	0.88
PIS4728-471M-04	470	1	20	980	0.79
PIS4728-561M-04	560	1	20	1070	0.73
PIS4728-681M-04	680	1	20	1480	0.67
PIS4728-821M-04	820	1	20	1640	0.6
PIS4728-102M-04	1000	1	20	1820	0.55

Material : Ferrite  
SPQ : Reel 500 [-04]

Remark : I - see description in  
Inductors Technical Data  
page 58

FOKY2 July 12, 1991  
Component – Electromagnetic Interference Filters

FASTRON SDN BHD E123071 (S)  
BAYAN LEPAS FREE TRADE ZONE , 11900 (A card)  
PENANG MALAYSIA

Appliance filters: Models LASC-5ROM, -6ROM, -7ROM, -120M, -151M, -200M, -211M, -300M, -421M, -600M, -750M, -161M, -231M, -471M, MESC-3ROM, -5ROM, -7ROM, -100M, -120M, -150M, -220M, -250M, -400M, -550M, -560M, -101M, -131M, -161M, -221M, -351M, -471M, -681M, -122M, -152M, MISC-1ROM, -2ROM, -3ROM, -6ROM, -140M, -300M, -400M, -101M, SMSC-1ROM, -2ROM, -3ROM, -6ROM, -100M, -230M, -500M, -700M, -161M, LSSC-5ROM, -9ROM, -150M, -250M, MSSC-3ROM, -6ROM, -110M, -130M, -200M, SSSC-4ROM, -6ROM, -8ROM, -170M, 50A-121M, -331M, -821M, -392M, -832M, 77A-3R9M, -5R6M, -150M, -330M, -680M, -101M, -151M, -331M, -681M, -102M, -152M, -332M, -682M, -103M, -100M.  
Choke coil: Models MICC-R10, -R12, -R15, -R18, -R22, -R27, -R33, -R39, -R47, -R56, -R68, -R82, -1R0, -1R2, -1R5, -1R8, -2R2, -2R7, -3R3, -3R9, -4R0, -4R7, -5R0, -5R6, -6R2, -6R8, -8R2, -100, -101, -102, -120, -121, -150, -151, -180, -181, -220, -221, -270, -271, -330, -331, -390, -391, -470, -471, -560, -561, -680, -681, -820, -821.

Reports: August 22, 1989; July 15, 1991.

337692001 Underwriters Laboratories Inc.® (Cont. on B card)  
D11/0169339

FOKY2 July 12, 1991  
Component – Electromagnetic Interference Filters

FASTRON SDN BHD E123071 (S)  
(B-cont. from A card)

Models MICC/N-R10, -R12, -R15, -R18, -R22, -R27, -R33, -R39, -R47, -R56, -R68, -R82, -1R0, -1R2, -1R5, -1R8, -2R2, -2R7, -3R3, -3R9, -4R0, -4R7, -5R0, -5R6, -6R2, -6R8, -8R2, -100, -101, -102, -120, -121, -150, -151, -180, -181, -220, -221, -270, -271, -330, -331, -390, -391, -470, -471, -560, -561, -680, -681, -820, -821.  
Models SMCC-R10, -R12, -R15, -R18, -R22, -R27, -R33, -R39, -R47, -R56, -R68, -R82, -1R0, -1R2, -1R5, -1R8, -2R2, -2R7, -3R3, -3R9, -4R7, -5R6, -6R2, -6R8, -8R2, -100, -101, -102, -103, -120, -121, -122, -131, -150, -151, -152, -161, -180, -181, -182, -201, -220, -221, -222, -270, -271, -272, -330, -331, -332, -390, -391, -392, -470, -471, -472, -502, -560, -561, -562, -680, -681, -682, -820, -821, -822.

Report: July 15, 1991.

337692001 Underwriters Laboratories Inc.® (Cont. on C card)  
D11/0195685

FOKY2 July 12, 1991  
Component – Electromagnetic Interference Filters

FASTRON SDN BHD E123071 (S)  
(C-cont. from B card)

Models SMCC/N-R10, -R12, -R15, -R18, -R22, -R27, -R33, -R39, -R47, -R56, -R68, -R82, -1R0, -1R2, -1R5, -1R8, -2R2, -2R7, -3R3, -3R9, -4R7, -5R6, -6R2, -6R8, -8R2, -100, -101, -102, -103, -120, -121, -122, -131, -150, -151, -152, -161, -180, -181, -182, -201, -220, -221, -222, -270, -271, -272, -330, -331, -332, -390, -391, -392, -470, -471, -472, -502, -560, -561, -562, -680, -681, -682, -820, -821, -822.

Marking: Company name or trademark  and model designation.

See General Information Preceding These Recognitions.

For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Report: July 15, 1991.

Cards E123071A, B and C (three cards) replace E123071 dated June 6, 1990.

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