

# AVX SMD Power Inductors






Version 14.2









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## LMax SMD Non-Shield Power Inductor


	<b>LMXN Series – Non-Shielded Style B</b>	<b>2-3</b>
	Inductance Range: 0.47 - 470 $\mu$ H Rated Current: 0.53 - 30 A	
	<b>LMXN Series – Non-Shielded Style C</b>	<b>4-7</b>
	Inductance Range: 0.47 - 1000 $\mu$ H Rated Current: 0.10 - 40 A	
	<b>LMXN Series – Non-Shielded Style D</b>	<b>8-11</b>
	Inductance Range: 1.0 - 820 $\mu$ H Rated Current: 0.24 - 3.30 A	


## LMax SMD Shielded Power Inductor


	<b>LMXS Series – Shielded Style B</b>	<b>12-15</b>
	Inductance Range: 0.47 - 6,800 $\mu$ H Rated Current: 0.017 - 4.70 A	
	<b>LMXS Series – Shielded Style C</b>	<b>16-20</b>
	Inductance Range: 0.36 - 2,500 $\mu$ H Rated Current: 0.026 - 12.6 A	
	<b>LMXS Series – Shielded Style D</b>	<b>21-23</b>
	Inductance Range: 1.0 - 10,000 $\mu$ H Rated Current: 0.02 - 5.0 A	
	<b>LMXS Series – Shielded Style F</b>	<b>24-27</b>
	Inductance Range: 1.2 - 1,500 $\mu$ H Rated Current: 0.13 - 8.20 A	
	<b>LMXS Series – Shielded Style G</b>	<b>28-29</b>
	Inductance Range: 10 - 1,000 $\mu$ H Rated Current: 0.16 - 1.84 A	

	<b>LMXS Series – Shielded Style H</b>	<b>30-32</b>
	Inductance Range: 2.4 - 1,000 $\mu$ H Rated Current: 0.40 - 8.0 A	

	<b>LMXS Series – Shielded Style J</b>	<b>33-34</b>
	Inductance Range: 1.30 - 1,000 $\mu$ H Rated Current: 0.40 - 10.50 A	

	<b>LMXS Series – Shielded Style L</b>	<b>35-36</b>
	Inductance Range: 0.80 - 330 $\mu$ H Rated Current: 0.70 - 11.20 A	

	<b>LMXS Series – Shielded Style M</b>	<b>37-38</b>
	Inductance Range: 1.0 - 100 $\mu$ H Rated Current: 0.75 - 9.0 A	

	<b>LMXS Series – Shielded Style P</b>	<b>39-42</b>
	Inductance Range: 1.0 - 180 $\mu$ H Rated Current: 0.22 - 3.50 A	

## LMax SMD Miniature Power Inductor

	<b>LMMN Series – Miniature Style M</b>	<b>43-50</b>
	Inductance Range: 0.12 - 10,000 $\mu$ H Rated Current: 0.03 - 6.0 A	

## LMax Low Profile Power Inductor

	<b>LMLP Series – Style C</b>	<b>51-56</b>
	Inductance Range: 0.8 - 220 $\mu$ H Rated Current: 0.22 - 11.0 A	

	<b>LMLP Series – Style D</b>	<b>57-63</b>
	Inductance Range: 0.10 - 47 $\mu$ H Rated Current: 3.0 - 120 A	

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# LMax SMD Power Inductor



## LMXN Series – Non-Shielded Style B

### FEATURES

- Miniature surface mount design
- High power, High saturation inductors
- Very low resistance
- Maximum power density
- Ideal inductors for DC–DC converters
- Available on tape and reel for auto surface mounting

### APPLICATIONS

- Notebook Computers
- Handheld Communications
- LCD Televisions
- Power Supply For VTRs
- DC/DC Converters, etc.

### CHARACTERISTICS

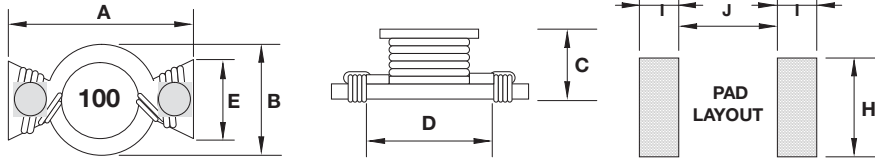
- Saturation Rated Current: The current when the inductance becomes 30% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ 85°C

### INDUCTANCE AND RATED CURRENT RANGES

- 0705 0.47μH ~ 22.0μH 7.7 ~ 0.70A
- 0906 0.56μH ~ 100μH 7.7 ~ 0.53A
- 1310 0.47μH ~ 100μH 11.4 ~ 0.95A
- 1913 0.47μH ~ 100μH 25.1 ~ 1.80A
- 2216 0.78μH ~ 470μH 30.0 ~ 0.8A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A max.	B max.	C max.	D	E	H	I	J
0705	7.50 (0.295)	5.20 (0.205)	3.20 (0.126)	4.60 (0.181)	2.50 (0.098)	4.00 (0.157)	2.00 (0.079)	4.00 (0.157)
0906	8.89 (0.350)	6.40 (0.252)	5.00 (0.197)	5.84 (0.230)	2.60 (0.103)	4.06 (0.160)	2.00 (0.079)	5.08 (0.200)
1310	13.20 (0.560)	9.90 (0.390)	6.35 (0.250)	9.50 (0.374)	4.50 (0.177)	6.50 (0.256)	2.30 (0.091)	9.00 (0.344)
1913	19.40 (0.764)	13.30 (0.524)	6.80 (0.268)	12.7 (0.500)	6.60 (0.260)	8.00 (0.315)	3.80 (0.150)	11.7 (0.460)
2216	22.35 (0.880)	16.26 (0.604)	8.00 (0.315)	16.0 (0.630)	8.00 (0.315)	8.64 (0.340)	4.30 (0.169)	14.35 (0.565)

### HOW TO ORDER

<b>LM</b>	<b>XN</b>	<b>0705</b>	<b>M</b>	<b>R04</b>	<b>B</b>	<b>T</b>	<b>A</b>	<b>S</b>
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	XN = Non-Shielded	0705 = 7x5xh (h = see catalog)	M = ±20% P = +40% -20%	R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH	T = Sn Plate	A = Standard	S = 13" Reel	



# LMax SMD Power Inductor



## LMXN Series – Non-Shielded Style B

### ELECTRICAL CHARACTERISTICS

#### 0705/0906/1310/1913/2216

Codes	L ( $\mu$ H)	Tolerance			Test Condition	DCR ( $\Omega$ ) max.					I sat (A) max*				
		705	0906 2216	1310 1913		0705	0906	1310	1913	2216	0705	0906	1310	1913	2216
R47	0.47	P	-	P	100KHz, 0.1V	0.025	-	0.005	0.003	-	7.7	-	11.4	25.1	-
R56	0.56	-	M	-	100KHz, 0.1V	-	0.010	-	-	-	-	7.7	-	-	-
R78	0.78	-	M	-	100KHz, 0.1V	-	-	-	-	0.003	-	-	-	-	30
1R0	1.0	M	-	P	100KHz, 0.1V	0.050	-	0.006	0.004	-	2.9	-	9.9	15.3	-
1R5	1.5	M	M	P	100KHz, 0.1V	0.050	-	0.008	0.006	0.004	2.6	-	7.9	12	25
2R2	2.2	M	M	M	100KHz, 0.1V	0.070	0.035	0.011	0.008	0.006	2.3	3.5	6.1	10.2	20
3R3	3.3	M	M	M	100KHz, 0.1V	0.080	0.040	0.014	0.009	0.009	2	3	5.1	9.3	17
3R9	3.9	-	M	-	100KHz, 0.1V	-	-	-	-	0.010	-	-	-	-	15
4R7	4.7	M	M	M	100KHz, 0.1V	0.090	0.054	0.018	0.012	0.014	1.5	2.6	4.2	7.7	13
6R0	6.0	-	M	-	100KHz, 0.1V	-	-	-	-	0.017	-	-	-	-	12
6R8	6.8	M	M	M	100KHz, 0.1V	0.130	0.08	0.027	0.019	-	1.2	2.2	3.6	6.2	-
7R8	7.8	-	M	-	100KHz, 0.1V	-	-	-	-	0.018	-	-	-	-	11
100	10	M	M	M	100KHz, 0.1V	0.160	0.111	0.038	0.027	0.026	1.1	1.9	3.3	5.2	10
150	15	M	M	M	100KHz, 0.1V	0.230	0.170	0.045	0.032	0.032	0.9	1.5	2.4	4.3	8
220	22	M	M	M	100KHz, 0.1V	0.370	0.250	0.070	0.050	0.043	0.7	1.2	2	3.7	7
330	33	-	M	M	100KHz, 0.1V	-	0.350	0.100	0.069	0.066	-	0.99	1.7	3	6
470	47	-	M	M	100KHz, 0.1V	-	0.470	0.150	0.109	0.096	-	0.87	1.4	2.4	5
680	68	-	M	M	100KHz, 0.1V	-	0.730	0.220	0.156	0.115	-	0.68	1.2	2	4
101	100	-	M	M	100KHz, 0.1V	-	1.110	0.280	0.206	0.165	-	0.53	0.95	1.8	3
221	220	-	M	-	100KHz, 0.1V	-	-	-	-	0.396	-	-	-	-	2.4
331	330	-	M	-	100KHz, 0.1V	-	-	-	-	0.588	-	-	-	-	1
471	470	-	M	-	100KHz, 0.1V	-	-	-	-	0.950	-	-	-	-	0.8

\*Saturation Current: The current when the inductance becomes 30% lower than its initial value. (Ta=25°C)

# LMax SMD Power Inductor



## LMXN Series – Non-Shielded Style C

### FEATURES

- High power, High saturation inductors
- Ideal inductors for DC-DC converters in notebook computers, PDAs, Step-up or step-down converters, flash memory programmers, etc.
- 0705 has ceramic base with gold-plating
- Others have LCP plastic base

### APPLICATIONS

- Portable Telephones
- Personal Computers
- DC/DC Converters
- Various Electronic Appliances

### CHARACTERISTICS

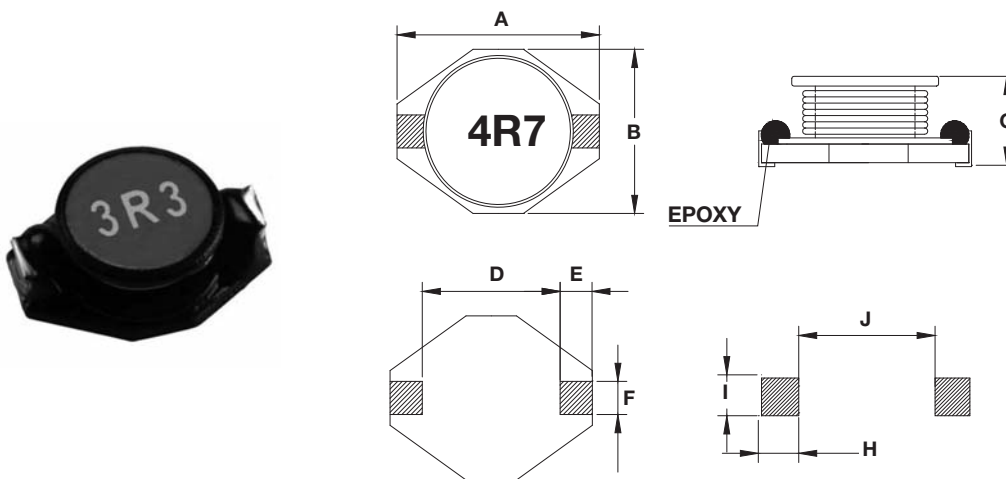
- Saturation Rated Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ 125°C

### INDUCTANCE AND RATED CURRENT RANGES

- 0705 1.0μH ~ 1000μH 2.9 ~ 0.10A
- 1309 4.7μH ~ 1000μH 4.2 ~ 0.29A
- 13E9 1.0μH ~ 1000μH 9.0 ~ 0.30A
- 13L9 0.47μH ~ 1000μH 40 ~ 0.8A
- 1915 1.0μH ~ 1000μH 20 ~ 1.0A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A max.	B max.	C max.	D	E	F	H	I	J
0705	6.60 (0.260)	4.45 (0.175)	2.92 (0.115)	4.32 (0.170)	1.27 (0.050)	1.02 (0.040)	3.56 (0.140)	1.40 (0.055)	4.06 (0.160)
1309	12.95 (0.510)	9.40 (0.370)	3.00 (0.118)	7.62 (0.300)	2.54 (0.100)	2.54 (0.100)	2.79 (0.110)	2.92 (0.115)	7.37 (0.290)
13E9	12.95 (0.510)	9.40 (0.370)	5.21 (0.205)	7.62 (0.300)	2.54 (0.100)	2.54 (0.100)	2.79 (0.110)	2.92 (0.115)	7.37 (0.290)
13L9	12.95 (0.510)	9.40 (0.370)	11.43 (0.450)	7.62 (0.300)	2.54 (0.100)	2.54 (0.100)	2.79 (0.110)	2.92 (0.115)	7.37 (0.290)
1915	18.54 (0.730)	15.24 (0.600)	7.11 (0.280)	12.7 (0.500)	2.54 (0.100)	2.54 (0.100)	2.79 (0.110)	2.92 (0.115)	12.45 (0.490)

# LMax SMD Power Inductor



## LMXN Series – Non-Shielded Style C

### HOW TO ORDER

<b>LM</b>   <b>Family</b>	<b>XN</b>   <b>Series</b>	<b>1309</b>   <b>Size</b>	<b>M</b>   <b>Tolerance</b>	<b>R04</b>   <b>Inductance</b>	<b>C</b>   <b>Style</b>	<b>T</b>   <b>Termination</b>	<b>A</b>   <b>Special</b>	<b>S</b>   <b>Packaging</b>
LM = Power Inductor	XN = Non-shielded	1309 = 13x9xh 13E9 = 13x9xE(h) (h = see catalog)	M = ±20% N = ±30%	R04 = 0.039µH R39 = 0.390µH 3R9 = 3.900µH 390 = 39.00µH 391 = 390.0µH 392 = 3900µH		T = Sn Plate	A = Standard	S = 13" Reel

### ELECTRICAL CHARACTERISTICS

#### 0705

Codes	L (µH)	Tolerance	Test Condition	DCR (Ω) max.	I sat (A) max*
1R0	1.0	M	100KHz, 0.1V	0.05	2.90
1R5	1.5	M	100KHz, 0.1V	0.06	2.60
2R2	2.2	M	100KHz, 0.1V	0.07	2.30
3R3	3.3	M	100KHz, 0.1V	0.08	2.00
4R7	4.7	M	100KHz, 0.1V	0.09	1.50
6R8	6.8	M	100KHz, 0.1V	0.13	1.20
8R2	8.2	M	100KHz, 0.1V	0.16	1.15
100	10	M	100KHz, 0.1V	0.16	1.10
150	15	M	100KHz, 0.1V	0.23	0.90
220	22	M	100KHz, 0.1V	0.37	0.70
330	33	M	100KHz, 0.1V	0.51	0.58
470	47	M	100KHz, 0.1V	0.64	0.50
680	68	M	100KHz, 0.1V	0.86	0.40
101	100	M	100KHz, 0.1V	1.27	0.31
151	150	M	100KHz, 0.1V	2.00	0.27
221	220	M	100KHz, 0.1V	3.11	0.22
331	330	M	100KHz, 0.1V	3.80	0.18
471	470	M	100KHz, 0.1V	5.06	0.16
681	680	M	100KHz, 0.1V	9.20	0.14
102	1000	M	100KHz, 0.1V	13.8	0.10

#### 1309

Codes	L (µH)	Tolerance	Test Condition	DCR (Ω) max.	I sat (A) max*
4R7	4.7	M	100KHz, 0.1V	0.036	4.20
6R8	6.8	M	100KHz, 0.1V	0.060	3.90
100	10	M	100KHz, 0.1V	0.085	2.70
150	15	M	100KHz, 0.1V	0.12	2.30
220	22	M	100KHz, 0.1V	0.18	1.80
330	33	M	100KHz, 0.1V	0.25	1.60
470	47	M	100KHz, 0.1V	0.32	1.30
680	68	M	100KHz, 0.1V	0.54	1.10
101	100	M	100KHz, 0.1V	0.69	0.87
151	150	M	100KHz, 0.1V	0.94	0.74
221	220	M	100KHz, 0.1V	1.60	0.56
331	330	M	100KHz, 0.1V	2.15	0.50
471	470	M	100KHz, 0.1V	3.30	0.40
681	680	M	100KHz, 0.1V	4.40	0.33
102	1000	M	100KHz, 0.1V	7.00	0.29

\*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

# LMax SMD Power Inductor



## LMXN Series – Non-Shielded Style C

### 13E9

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I sat (A) max*
1R0	1.0	M	100KHz, 0.1V	0.009	9.00
1R5	1.5	M	100KHz, 0.1V	0.010	8.00
2R2	2.2	M	100KHz, 0.1V	0.012	7.00
3R3	3.3	M	100KHz, 0.1V	0.015	6.40
4R7	4.7	M	100KHz, 0.1V	0.018	5.40
6R8	6.8	M	100KHz, 0.1V	0.027	4.60
100	10	M	100KHz, 0.1V	0.038	3.80
150	15	M	100KHz, 0.1V	0.046	3.00
220	22	M	100KHz, 0.1V	0.085	2.60
330	33	M	100KHz, 0.1V	0.100	2.00
470	47	M	100KHz, 0.1V	0.140	1.60
680	68	M	100KHz, 0.1V	0.200	1.40
101	100	M	100KHz, 0.1V	0.280	1.20
151	150	M	100KHz, 0.1V	0.400	1.00
221	220	M	100KHz, 0.1V	0.610	0.80
331	330	M	100KHz, 0.1V	1.020	0.60
471	470	M	100KHz, 0.1V	1.270	0.50
681	680	M	100KHz, 0.1V	2.020	0.40
102	1000	M	100KHz, 0.1V	3.000	0.30

### 13L9

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I sat (A) max*
R47	0.47	N	100KHz, 0.1V	0.008	40.0
R82	0.82	N	100KHz, 0.1V	0.009	34.7
1R2	1.2	N	100KHz, 0.1V	0.010	28.4
1R5	1.5	N	100KHz, 0.1V	0.010	25.7
2R2	2.2	N	100KHz, 0.1V	0.012	23.0
3R5	3.5	N	100KHz, 0.1V	0.015	21.0
4R7	4.7	N	100KHz, 0.1V	0.020	18.0
5R6	5.6	N	100KHz, 0.1V	0.022	16.0
6R8	6.8	N	100KHz, 0.1V	0.030	15.0
8R2	8.2	N	100KHz, 0.1V	0.033	10.0
100	10	M	100KHz, 0.1V	0.040	8.00
150	15	M	100KHz, 0.1V	0.050	7.00
220	22	M	100KHz, 0.1V	0.066	5.50
330	33	M	100KHz, 0.1V	0.080	4.00
470	47	M	100KHz, 0.1V	0.11	3.80
680	68	M	100KHz, 0.1V	0.17	3.00
101	100	M	100KHz, 0.1V	0.22	2.50
151	150	M	100KHz, 0.1V	0.34	2.00
221	220	M	100KHz, 0.1V	0.44	1.60
331	330	M	100KHz, 0.1V	0.70	1.20
471	470	M	100KHz, 0.1V	0.95	1.00
681	680	M	100KHz, 0.1V	1.20	1.00
102	1000	M	100KHz, 0.1V	2.00	0.80

\*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)

# LMax SMD Power Inductor



## Non-Shielded Style C

### 1915

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I sat (A) max*
1R0	1.0	M	100KHz, 0.1V	0.009	20
2R2	2.2	M	100KHz, 0.1V	0.014	16
3R3	3.3	M	100KHz, 0.1V	0.018	14
5R6	5.6	M	100KHz, 0.1V	0.020	12
100	10	M	100KHz, 0.1V	0.031	10
150	15	M	100KHz, 0.1V	0.036	8.0
220	22	M	100KHz, 0.1V	0.047	7.0
330	33	M	100KHz, 0.1V	0.066	5.5
470	47	M	100KHz, 0.1V	0.095	4.5
680	68	M	100KHz, 0.1V	0.130	3.5
101	100	M	100KHz, 0.1V	0.190	3.0
151	150	M	100KHz, 0.1V	0.250	2.6
221	220	M	100KHz, 0.1V	0.380	2.4
331	330	M	100KHz, 0.1V	0.560	1.9
471	470	M	100KHz, 0.1V	0.850	1.4
681	680	M	100KHz, 0.1V	1.100	1.2
102	1000	M	100KHz, 0.1V	1.800	1.0

\*Saturation Current: The current when the inductance becomes 10% lower than its initial value. (Ta=25°C)



# LMax SMD Power Inductor



## LMXN Series – Non-Shielded Style D

### FEATURES

- Open Magnetic Circuit Construction
- Small Surface Area

### APPLICATIONS

- LCD Televisions
- Notebooks
- Portable Communication
- DC/DC Converters, etc.

### CHARACTERISTICS

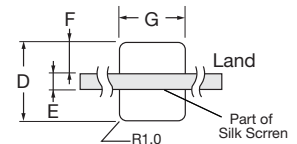
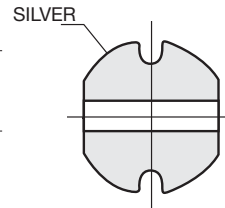
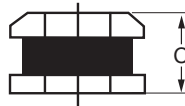
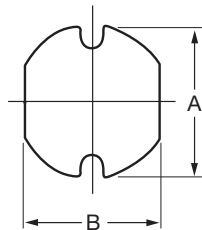
- Rated Current (IDC): The DC current that will cause an approximate  $\Delta T$  of 40°C. ( $T_a=25^\circ\text{C}$ )
- Operating temperature range:  $-40^\circ\text{C} \sim +125^\circ\text{C}$

### INDUCTANCE AND RATED CURRENT RANGES

- 0504 1.0 $\mu\text{H}$  ~ 33  $\mu\text{H}$  3.30 ~ 0.56A
- 0605 10.0 $\mu\text{H}$  ~ 220  $\mu\text{H}$  1.44 ~ 0.35A
- 0808 10.0 $\mu\text{H}$  ~ 330  $\mu\text{H}$  1.44 ~ 0.28A
- 08G8 10.0 $\mu\text{H}$  ~ 470  $\mu\text{H}$  2.30 ~ 0.34A
- 1009 10.0 $\mu\text{H}$  ~ 560  $\mu\text{H}$  2.38 ~ 0.32A
- 10F9 10.0 $\mu\text{H}$  ~ 820  $\mu\text{H}$  2.6 ~ 0.24A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A	B	C	D	E	F	G
0504	4.50 ± 0.30 (0.177 ± .012)	4.00 ± 0.30 (0.158 ± 0.012)	3.20 ± 0.30 (0.126 ± 0.012)	5.00 (0.197)	1.50 (0.059)	1.75 (0.069)	4.50 (0.177)
0605	5.80 ± 0.30 (0.228 ± .012)	5.20 ± 0.30 (0.205 ± 0.012)	4.50 ± 0.35 (0.177 ± 0.014)	6.00 (0.236)	1.70 (0.067)	2.15 (0.085)	5.50 (0.217)
0808	7.80 ± 0.30 (0.307 ± .012)	7.30 ± 0.30 (0.276 ± 0.012)	3.50 ± 0.50 (0.140 ± 0.020)	8.00 (0.315)	2.00 (0.079)	3.00 (0.118)	7.50 (0.295)
08G8	7.80 ± 0.30 (0.307 ± .012)	7.30 ± 0.30 (0.287 ± 0.012)	5.08 ± 0.50 (0.200 ± 0.020)	8.00 (0.315)	2.00 (0.079)	3.00 (0.118)	7.50 (0.295)
1009	10.0 ± 0.30 (0.394 ± .012)	9.00 ± 0.30 (0.354 ± 0.012)	4.00 ± 0.50 (0.158 ± 0.020)	10.0 (0.394)	2.50 (0.098)	3.75 (0.148)	9.50 (0.374)
10F9	10.0 ± 0.40 (0.394 ± .016)	9.00 ± 0.40 (0.354 ± 0.016)	5.40 ± 0.40 (0.213 ± 0.016)	10.0 (0.394)	2.50 (0.098)	3.75 (0.148)	9.50 (0.374)

### HOW TO ORDER

**LM**

**Family**

LM = Power Inductor

**XN**

**Series**

XN = Non-shielded

**1009**

**Size**

1009 = 10x9xh  
10F9 = 10x9xF(h)  
(h = see catalog)

**M**

**Tolerance**

M = ±20%

**R04**

**Inductance**

1R0 = 1.00 $\mu\text{H}$   
390 = 39.00 $\mu\text{H}$   
391 = 390.0 $\mu\text{H}$

**D**

**Style**

**T**

**Termination**

T = Sn Plate

**A**

**Special**

A = Standard

**S**

**Packaging**

S = 13" Reel



# LMax SMD Power Inductor



## LMXN Series – Non-Shielded Style D

### ELECTRICAL CHARACTERISTICS

#### 0504

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
1R0	1.0	M	100KHz, 1.0V	0.048	3.30
1R4	1.4	M	100KHz, 1.0V	0.056	2.80
1R8	1.8	M	100KHz, 1.0V	0.063	2.45
2R2	2.2	M	100KHz, 1.0V	0.071	2.21
2R7	2.7	M	100KHz, 1.0V	0.078	2.00
3R3	3.3	M	100KHz, 1.0V	0.086	1.81
3R9	3.9	M	100KHz, 1.0V	0.093	1.66
4R7	4.7	M	100KHz, 1.0V	0.108	1.51
5R6	5.6	M	100KHz, 1.0V	0.125	1.40
6R8	6.8	M	100KHz, 1.0V	0.131	1.26
8R2	8.2	M	100KHz, 1.0V	0.146	1.14
100	10	M	100KHz, 1.0V	0.182	1.04
120	12	M	100KHz, 1.0V	0.210	0.97
150	15	M	100KHz, 1.0V	0.235	0.85
180	18	M	100KHz, 1.0V	0.338	0.74
220	22	M	100KHz, 1.0V	0.378	0.68
270	27	M	100KHz, 1.0V	0.522	0.62
330	33	M	100KHz, 1.0V	0.540	0.56

#### 0605

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
100	10	M	100KHz, 1.0V	0.100	1.44
120	12	M	100KHz, 1.0V	0.120	1.40
150	15	M	100KHz, 1.0V	0.140	1.30
180	18	M	100KHz, 1.0V	0.150	1.23
220	22	M	100KHz, 1.0V	0.180	1.11
270	27	M	100KHz, 1.0V	0.200	0.97
330	33	M	100KHz, 1.0V	0.230	0.88
390	39	M	100KHz, 1.0V	0.320	0.80
470	47	M	100KHz, 1.0V	0.370	0.72
560	56	M	100KHz, 1.0V	0.420	0.68
680	68	M	100KHz, 1.0V	0.460	0.61
820	82	M	100KHz, 1.0V	0.600	0.58
101	100	M	100KHz, 1.0V	0.700	0.52
121	120	M	100KHz, 1.0V	0.930	0.48
151	150	M	100KHz, 1.0V	1.100	0.40
181	180	M	100KHz, 1.0V	1.380	0.38
221	220	M	100KHz, 1.0V	1.570	0.35

# LMax SMD Power Inductor



## LMXN Series – Non-Shielded Style D

### 0808

Codes	L (µH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
100	10	M	100KHz, 1.0V	1.44	0.081
120	12	M	100KHz, 1.0V	1.39	0.089
150	15	M	100KHz, 1.0V	1.24	0.104
180	18	M	100KHz, 1.0V	1.12	0.111
220	22	M	100KHz, 1.0V	1.07	0.129
270	27	M	100KHz, 1.0V	0.94	0.153
330	33	M	100KHz, 1.0V	0.85	0.170
390	39	M	100KHz, 1.0V	0.74	0.217
470	47	M	100KHz, 1.0V	0.68	0.252
560	56	M	100KHz, 1.0V	0.64	0.282
680	68	M	100KHz, 1.0V	0.59	0.332
820	82	M	100KHz, 1.0V	0.54	0.406
101	100	M	100KHz, 1.0V	0.51	0.481
121	120	M	100KHz, 1.0V	0.49	0.536
151	150	M	100KHz, 1.0V	0.40	0.755
181	180	M	100KHz, 1.0V	0.36	1.022
221	220	M	100KHz, 1.0V	0.31	1.200
271	270	M	100KHz, 1.0V	0.29	1.306
331	330	M	100KHz, 1.0V	0.28	1.495

### 08G8

Codes	L (µH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
100	10	M	100KHz, 1.0V	0.070	2.30
120	12	M	100KHz, 1.0V	0.080	2.00
150	15	M	100KHz, 1.0V	0.090	1.80
180	18	M	100KHz, 1.0V	0.100	1.60
220	22	M	100KHz, 1.0V	0.110	1.50
270	27	M	100KHz, 1.0V	0.120	1.30
330	33	M	100KHz, 1.0V	0.130	1.20
470	47	M	100KHz, 1.0V	0.180	1.00
560	56	M	100KHz, 1.0V	0.240	0.94
680	68	M	100KHz, 1.0V	0.280	0.85
820	82	M	100KHz, 1.0V	0.370	0.78
101	100	M	100KHz, 1.0V	0.430	0.72
121	120	M	100KHz, 1.0V	0.470	0.66
151	150	M	100KHz, 1.0V	0.640	0.58
221	220	M	100KHz, 1.0V	0.960	0.49
331	330	M	100KHz, 1.0V	1.260	0.40
391	390	M	100KHz, 1.0V	1.770	0.36
471	470	M	100KHz, 1.0V	1.960	0.34

# LMax SMD Power Inductor



## LMXN Series – Non-Shielded Style D

### 1009

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
100	10	M	100KHz, 1.0V	0.053	2.38
120	12	M	100KHz, 1.0V	0.061	2.13
150	15	M	100KHz, 1.0V	0.070	1.87
180	18	M	100KHz, 1.0V	0.081	1.73
220	22	M	100KHz, 1.0V	0.088	1.60
330	33	M	100KHz, 1.0V	0.120	1.26
470	47	M	100KHz, 1.0V	0.170	1.10
560	56	M	100KHz, 1.0V	0.199	1.01
680	68	M	100KHz, 1.0V	0.223	0.91
820	82	M	100KHz, 1.0V	0.252	0.85
101	100	M	100KHz, 1.0V	0.344	0.74
121	120	M	100KHz, 1.0V	0.396	0.69
181	180	M	100KHz, 1.0V	0.621	0.56
221	220	M	100KHz, 1.0V	0.721	0.53
331	330	M	100KHz, 1.0V	1.100	0.42
471	470	M	100KHz, 1.0V	1.526	0.35
561	560	M	100KHz, 1.0V	1.904	0.32

### 10F9

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
100	10	M	100KHz, 1.0V	0.060	2.60
120	12	M	100KHz, 1.0V	0.070	2.45
150	15	M	100KHz, 1.0V	0.080	2.27
220	22	M	100KHz, 1.0V	0.100	1.95
330	33	M	100KHz, 1.0V	0.120	1.50
390	39	M	100KHz, 1.0V	0.140	1.37
470	47	M	100KHz, 1.0V	0.170	1.28
560	56	M	100KHz, 1.0V	0.190	1.17
680	68	M	100KHz, 1.0V	0.220	1.11
820	82	M	100KHz, 1.0V	0.250	1.00
101	100	M	100KHz, 1.0V	0.350	0.97
121	120	M	100KHz, 1.0V	0.400	0.89
151	150	M	100KHz, 1.0V	0.470	0.78
221	220	M	100KHz, 1.0V	0.730	0.66
271	270	M	100KHz, 1.0V	0.970	0.57
331	330	M	100KHz, 1.0V	1.150	0.52
471	470	M	100KHz, 1.0V	1.480	0.42
561	560	M	100KHz, 1.0V	1.900	0.33
821	820	M	100KHz, 1.0V	2.550	0.24

# LMax SMD Power Inductor



## LMXS Series – Shielded Style B

### FEATURES

- Directly connected electrode on ferrite core
- Excellent property with high saturation for surface mounting

### APPLICATIONS

- OA Equipment
- Notebook PCs
- LCD Monitor
- Portable Terminal Equipment
- DC/DC Converters, etc.
- Power Supply for VTR

### CHARACTERISTICS

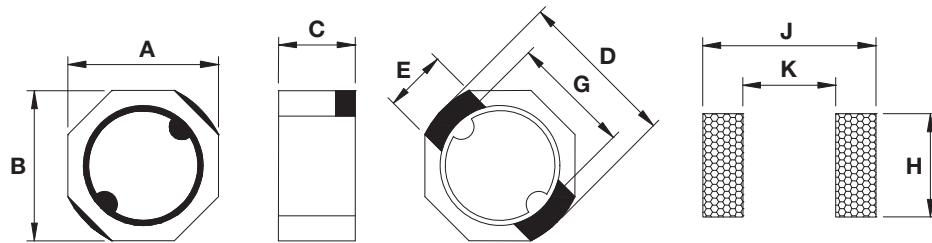
- Rated DC Current: The current when the inductance becomes 30% lower than its initial value.
- Operating temperature: -40 ~ 85°C

### INDUCTANCE AND RATED CURRENT RANGES

- 04B4 0.47 ~ 2200μH 1.84 ~ 0.035A
- 04C4 1.0 ~ 6800μH 1.90 ~ 0.017A
- 04A4 1.0 ~ 100μH 1.50 ~ 0.100A
- 0505 0.47 ~ 820μH 2.33 ~ 0.030A
- 05C5 0.47 ~ 2500μH 4.82 ~ 0.045A
- 0606 1.0 ~ 3300μH 4.70 ~ 0.026A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A	B	C max.	D	E	G	H	K	J
04B4	3.85 ± 0.30 (0.152 ± 0.012)	3.85 ± 0.30 (0.152 ± 0.012)	2.00 (0.079)	3.9 ± 0.20 (0.154 ± 0.008)	1.60 (0.063)	3.20 (0.126)	1.90 (0.075)	3.00 (0.118)	4.55 (0.179)
04C4	3.85 ± 0.30 (0.152 ± 0.012)	3.85 ± 0.30 (0.152 ± 0.012)	3.00 (0.118)	3.9 ± 0.20 (0.154 ± 0.008)	1.60 (0.063)	3.20 (0.126)	1.90 (0.075)	3.00 (0.118)	4.55 (0.179)
04A4	3.85 ± 0.30 (0.152 ± 0.012)	3.85 ± 0.30 (0.152 ± 0.012)	1.50 (0.059)	4.80 max. (0.189 max.)	1.60 (0.063)	3.00 (0.118)	2.00 (0.079)	2.60 (0.102)	5.20 (0.205)
0505	5.30 max. (0.207 max.)	5.30 max. (0.207 max.)	2.00 (0.079)	5.7 ± 0.40 (0.224 ± 0.016)	1.60 (0.063)	4.20 (0.165)	1.90 (0.075)	3.90 (0.154)	5.70 (0.224)
05C5	5.30 max. (0.207 max.)	5.30 max. (0.207 max.)	3.00 (0.118)	5.7 ± 0.40 (0.224 ± 0.016)	1.60 (0.063)	4.20 (0.165)	1.90 (0.075)	3.90 (0.154)	5.70 (0.224)
0606	5.90 ± 0.20 (0.232 ± 0.008)	5.90 ± 0.20 (0.232 ± 0.008)	3.00 (0.118)	6.4 ± 0.30 (0.252 ± 0.012)	2.40 (0.094)	4.70 (0.185)	2.70 (0.106)	4.40 (0.173)	6.50 (0.256)

### HOW TO ORDER

<b>LM</b>	<b>XS</b>	<b>0505</b>	<b>M</b>	<b>R04</b>	<b>B</b>	<b>T</b>	<b>A</b>	<b>S</b>
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	XS = Shielded	0505 = 5x5xh 05A5 = 5x5xA(h) (h = see catalog)	M = ±20% N = ±30% P = ±40%	R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH	T = Sn Plate	A = Standard	S = 13" Reel	

# LMax SMD Power Inductor



## LMXS Series – Shielded Style B

### ELECTRICAL CHARACTERISTICS

#### 04B4/04C4

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.		I sat (A) max*	
				04B4	04C4	04B4	04C4
R47	0.47	N	100 KHz, 0.25V	0.017	–	1.84	–
1R0	1.0	N	100 KHz, 0.25V	0.030	0.009	1.80	1.90
1R2	1.2	N	100 KHz, 0.25V	0.043	0.010	1.70	1.75
1R5	1.5	N	100 KHz, 0.25V	0.052	0.013	1.60	1.45
1R8	1.8	N	100 KHz, 0.25V	0.056	–	1.55	–
2R0	2.0	N	100 KHz, 0.25V	0.057	0.016	1.51	1.25
2R2	2.2	N	100 KHz, 0.25V	0.058	0.025	1.50	1.15
2R4	2.4	N	100 KHz, 0.25V	0.059	–	1.41	–
2R5	2.5	N	100 KHz, 0.25V	0.059	0.018	1.40	1.05
2R7	2.7	N	100 KHz, 0.25V	0.060	0.020	1.35	1.00
3R3	3.3	N	100 KHz, 0.25V	0.064	0.030	1.30	0.96
3R5	3.5	N	100 KHz, 0.25V	0.127	0.025	1.30	0.95
3R9	3.9	N	100 KHz, 0.25V	–	0.033	–	0.87
4R7	4.7	N	100 KHz, 0.25V	0.146	0.039	1.10	0.78
5R6	5.6	N	100 KHz, 0.25V	0.176	0.044	0.95	0.74
6R2	6.2	N	100 KHz, 0.25V	0.220	–	0.91	–
6R8	6.8	N	100 KHz, 0.25V	0.238	0.051	0.90	0.68
8R2	8.2	N	100 KHz, 0.25V	0.272	0.065	0.80	0.57
100	10	M	1KHz, 0.25V	0.299	0.092	0.70	0.43
120	12	M	1KHz, 0.25V	–	0.100	–	0.38
150	15	M	1KHz, 0.25V	0.472	0.113	0.61	0.33
180	18	M	1KHz, 0.25V	0.552	0.125	0.58	0.30
220	22	M	1KHz, 0.25V	0.592	0.146	0.52	0.28
270	27	M	1KHz, 0.25V	0.630	0.176	0.44	0.26
330	33	M	1KHz, 0.25V	1.075	0.214	0.43	0.23
390	39	M	1KHz, 0.25V	1.269	0.225	0.37	0.21
470	47	M	1KHz, 0.25V	1.309	0.304	0.34	0.19
500	50	M	1KHz, 0.25V	–	–	–	–
560	56	M	1KHz, 0.25V	1.960	0.324	0.29	0.170
680	68	M	1KHz, 0.25V	2.613	0.472	0.25	0.156
820	82	M	1KHz, 0.25V	2.950	0.539	0.20	0.142
101	100	M	1KHz, 0.25V	3.255	0.608	0.19	0.128
121	120	M	1KHz, 0.25V	3.350	0.757	0.15	0.116
151	150	M	1KHz, 0.25V	3.550	0.882	0.12	0.106
181	180	M	1KHz, 0.25V	4.000	1.130	0.10	0.095
221	220	M	1KHz, 0.25V	4.900	1.269	0.09	0.087
271	270	M	1KHz, 0.25V	–	1.570	–	0.080
331	330	M	1KHz, 0.25V	7.280	1.930	0.08	0.078
391	390	M	1KHz, 0.25V	–	2.360	–	0.073
471	470	M	1KHz, 0.25V	–	2.770	–	0.068
561	560	M	1KHz, 0.25V	–	3.520	–	0.065
681	680	M	1KHz, 0.25V	13.37	4.250	0.07	0.056
821	820	M	1KHz, 0.25V	–	4.830	–	0.050
102	1000	M	1KHz, 0.25V	19.55	6.260	0.065	0.047
122	1200	M	1KHz, 0.25V	–	7.860	–	0.043
152	1500	M	1KHz, 0.25V	36.15	9.980	0.038	0.039

\*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

# LMax SMD Power Inductor



## LMXS Series – Shielded Style B

### 04A4

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I sat (A) max*
1R0	1.0	N	100KHz, 0.1V	0.058	1.50
1R2	1.2	N	100KHz, 0.1V	0.070	1.40
2R2	2.2	N	100KHz, 0.1V	0.082	1.00
3R3	3.3	N	100KHz, 0.1V	0.105	0.92
3R9	3.9	N	100KHz, 0.1V	0.120	0.80
4R7	4.7	N	100KHz, 0.1V	0.150	0.76
5R6	5.6	N	100KHz, 0.1V	0.180	0.69
6R8	6.8	N	100KHz, 0.1V	0.220	0.62
8R2	8.2	N	100KHz, 0.1V	0.240	0.56
100	10	N	100KHz, 0.1V	0.255	0.50
150	15	N	100KHz, 0.1V	0.390	0.40
220	22	M	100KHz, 0.1V	0.610	0.32
330	33	M	100KHz, 0.1V	0.920	0.28
470	47	M	100KHz, 0.1V	1.130	0.20
680	68	M	100KHz, 0.1V	1.520	0.15
101	100	M	100KHz, 0.1V	2.120	0.10

\*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

# LMax SMD Power Inductor



## LMXS Series – Shielded Style B

### 0505/05C5/0606

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.			I sat (A) max*		
				0505	05C5	0606	0505	05C5	0606
R47	0.47	N	100KHz, 0.25V	0.015	0.010	–	2.33	4.82	–
1R0	1.0	N	100KHz, 0.25V	0.024	0.015	0.014	2.27	4.00	4.70
1R1	1.1	N	100KHz, 0.25V	–	0.020	–	–	3.87	–
1R2	1.2	N	100KHz, 0.25V	0.044	0.022	0.016	2.15	3.80	3.90
1R5	1.5	N	100KHz, 0.25V	–	–	0.018	–	–	3.52
1R8	1.8	N	100KHz, 0.25V	–	–	0.019	–	–	3.25
2R0	2.0	N	100KHz, 0.25V	0.046	0.027	0.022	1.90	2.92	2.95
2R2	2.2	N	100KHz, 0.25V	0.059	0.029	0.022	1.63	2.41	2.95
2R4	2.4	N	100KHz, 0.25V	0.062	0.034	0.024	1.50	2.36	2.75
2R7	2.7	N	100KHz, 0.25V	–	–	0.027	–	–	2.55
3R3	3.3	N	100KHz, 0.25V	0.073	0.040	0.030	1.34	1.95	2.45
3R9	3.9	N	100KHz, 0.25V	0.081	–	0.034	1.20	–	2.35
4R1	4.1	N	100KHz, 0.25V	0.087	0.045	–	1.14	1.87	–
4R7	4.7	N	100KHz, 0.25V	–	0.052	0.042	–	1.60	2.25
5R6	5.6	N	100KHz, 0.25V	–	–	0.048	–	–	2.05
6R8	6.8	N	100KHz, 0.25V	0.105	0.068	0.054	0.95	1.51	1.85
8R2	8.2	N	100KHz, 0.25V	0.139	0.084	0.058	0.90	1.38	1.65
100	10	M	1KHz, 0.25V	0.150	0.090	0.065	0.76	1.33	1.45
120	12	M	1KHz, 0.25V	–	0.120	0.082	–	1.06	1.35
150	15	M	1KHz, 0.25V	0.210	0.142	0.096	0.63	1.05	1.25
180	18	M	1KHz, 0.25V	–	0.192	0.110	–	0.90	1.15
220	22	M	1KHz, 0.25V	0.275	0.208	0.140	0.56	0.86	0.98
270	27	M	1KHz, 0.25V	0.452	0.222	0.170	0.48	0.75	0.90
330	33	M	1KHz, 0.25V	0.455	0.257	0.210	0.44	0.72	0.80
390	39	M	1KHz, 0.25V	–	0.320	0.240	–	0.64	0.72
470	47	M	1KHz, 0.25V	0.730	0.352	0.280	0.35	0.62	0.70
560	56	M	1KHz, 0.25V	–	0.459	0.340	–	0.53	0.66
680	68	M	1KHz, 0.25V	0.935	0.525	0.410	0.30	0.51	0.58
820	82	M	1KHz, 0.25V	1.300	0.770	0.490	0.27	0.48	0.52
101	100	M	1KHz, 0.25V	1.500	0.801	0.550	0.23	0.43	0.46
121	120	M	1KHz, 0.25V	1.910	0.850	0.700	0.22	0.34	0.42
151	150	M	1KHz, 0.25V	2.680	1.100	0.780	0.21	0.26	0.36
181	180	M	1KHz, 0.25V	3.040	1.190	0.960	0.20	0.24	0.34
221	220	M	1KHz, 0.25V	3.520	1.530	1.080	0.195	0.20	0.32
271	270	M	1KHz, 0.25V	4.380	–	1.360	0.193	–	0.28
331	330	M	1KHz, 0.25V	5.560	2.030	1.820	0.190	0.19	0.24
391	390	M	1KHz, 0.25V	–	3.000	2.050	–	0.16	0.22
471	470	M	1KHz, 0.25V	7.820	3.500	2.580	0.180	0.15	0.20
561	560	M	1KHz, 0.25V	–	4.080	3.160	–	0.14	0.18
681	680	M	1KHz, 0.25V	–	–	4.040	–	–	0.16
821	820	M	1KHz, 0.25V	15.00	–	4.900	0.120	–	0.14
102	1000	M	1KHz, 0.25V	–	–	6.000	–	–	0.13
122	1200	M	1KHz, 0.25V	–	8.500	7.600	–	0.070	0.12
152	1522	M	1KHz, 0.25V	–	10.00	9.440	–	0.065	0.10
182	1800	M	1KHz, 0.25V	–	13.15	11.70	–	0.062	0.098
222	2200	M	1KHz, 0.25V	–	19.00	13.40	–	0.050	0.095
252	2500	M	1KHz, 0.25V	–	20.00	–	–	0.045	–
272	2700	M	1KHz, 0.25V	–	–	17.30	–	–	0.086
332	3300	M	1KHz, 0.25V	–	–	22.10	–	–	0.078

\*Saturation Current: The current when the inductance becomes 30% lower than its initial value.



# LMax SMD Power Inductor



## LMXS Series – Shielded Style C

### FEATURES

- Directly connected electrode on ferrite core
- Available in magnetically shielded
- Low DC resistance
- Suitable for large current
- Available on tape and reel for auto surface mounting

### APPLICATIONS

- Power Supply For VTRs
- OA Equipment.
- Notebook PCs
- Portable Communication Equipment
- DC/DC Converters, etc.

### CHARACTERISTICS

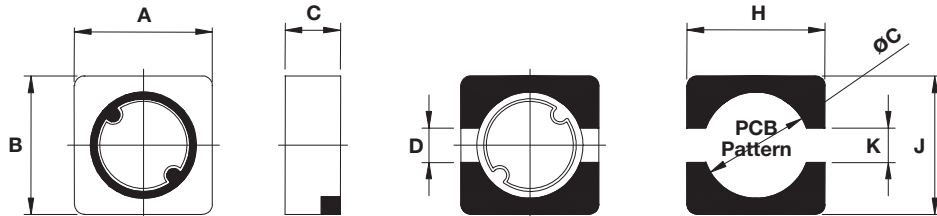
- Rated Current:  
0404/04B4/0505/05B5/05C5/0707/07B7/07D7: The DC current when the inductance becomes 30% lower than its initial value.  
04C4/101B/101D/101H: The DC current when the inductance becomes 35% lower than its initial value. (Ta=25°C)
- Operating temperature range: -40 ~ +105°C

### INDUCTANCE AND RATED CURRENT RANGES

- |        |               |               |
|--------|---------------|---------------|
| • 0404 | 1.0 ~ 180μH   | 1.60 ~ 0.110A |
| • 04B4 | 0.47 ~ 1800μH | 1.84 ~ 0.036A |
| • 04C4 | 1.5 ~ 560μH   | 1.90 ~ 0.090A |
| • 0505 | 1.2 ~ 1000μH  | 1.77 ~ 0.067A |
| • 05B5 | 1.0 ~ 820μH   | 2.70 ~ 0.026A |
| • 05C5 | 1.0 ~ 2500μH  | 4.00 ~ 0.045A |
| • 0707 | 1.0 ~ 820μH   | 3.28 ~ 0.100A |
| • 07B7 | 1.0 ~ 1500μH  | 3.52 ~ 0.095A |
| • 07D7 | 0.36 ~ 1000μH | 9.24 ~ 0.180A |
| • 101B | 1.0 ~ 2200μH  | 4.10 ~ 0.100A |
| • 101D | 0.56 ~ 1000μH | 12.6 ~ 0.280A |
| • 101H | 0.56 ~ 39μH   | 10.18 ~ 1.30A |
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A	B	C max.	D	H	J	K	øC
0404	3.80 ± 0.30 (0.150 ± 0.012)	3.80 ± 0.30 (0.150 ± 0.012)	1.25 (0.049)	1.20 (0.047)	4.40 (0.173)	4.40 (0.173)	1.10 (0.043)	3.00 (0.118)
04B4	3.80 ± 0.30 (0.150 ± 0.012)	3.80 ± 0.30 (0.150 ± 0.012)	2.00 (0.079)	1.20 (0.047)	4.40 (0.173)	4.40 (0.173)	1.10 (0.043)	3.00 (0.118)
04C4	3.80 ± 0.30 (0.150 ± 0.012)	3.80 ± 0.30 (0.150 ± 0.012)	3.00 (0.118)	1.20 (0.047)	4.40 (0.173)	4.40 (0.173)	1.10 (0.043)	3.00 (0.118)
0505	5.00 ± 0.30 (0.197 ± 0.012)	5.00 ± 0.30 (0.197 ± 0.012)	1.20 (0.047)	2.00 (0.079)	5.90 (0.232)	5.90 (0.232)	1.90 (0.075)	4.20 (0.165)
05B5	5.00 ± 0.30 (0.197 ± 0.012)	5.00 ± 0.30 (0.197 ± 0.012)	2.00 (0.079)	2.00 (0.079)	5.90 (0.232)	5.90 (0.232)	1.90 (0.075)	4.20 (0.165)
05C5	5.00 ± 0.30 (0.197 ± 0.012)	5.00 ± 0.30 (0.197 ± 0.012)	3.00 (0.118)	2.00 (0.079)	5.90 (0.232)	5.90 (0.232)	1.90 (0.075)	4.20 (0.165)
0707	6.90 ± 0.30 (0.272 ± 0.012)	6.90 ± 0.30 (0.272 ± 0.012)	1.50 (0.059)	2.50 (0.098)	7.30 (0.287)	7.30 (0.287)	2.00 (0.079)	5.30 (0.209)
07B7	6.90 ± 0.30 (0.272 ± 0.012)	6.90 ± 0.30 (0.272 ± 0.012)	1.90 (0.075)	2.50 (0.098)	7.30 (0.287)	7.30 (0.287)	2.00 (0.079)	5.30 (0.209)
07D7	7.00 ± 0.40 (0.276 ± 0.016)	7.00 ± 0.40 (0.276 ± 0.016)	4.30 (0.169)	1.80 (0.071)	8.00 (0.315)	8.00 (0.315)	1.60 (0.063)	6.00 (0.236)
101B	10.0 ± 0.30 (0.394 ± 0.012)	10.0 ± 0.30 (0.394 ± 0.012)	1.50 (0.059)	2.50 (0.098)	10.6 (0.315)	10.6 (0.315)	2.30 (0.091)	8.00 (0.315)
101D	10.0 ± 0.30 (0.394 ± 0.012)	10.0 ± 0.30 (0.394 ± 0.012)	4.00 (0.157)	2.50 (0.098)	10.6 (0.315)	10.6 (0.315)	2.30 (0.091)	8.00 (0.315)
101H	10.0 ± 0.30 (0.394 ± 0.012)	10.0 ± 0.30 (0.394 ± 0.012)	6.70 (0.264)	2.50 (0.098)	10.6 (0.315)	10.6 (0.315)	2.30 (0.091)	8.00 (0.315)



# LMax SMD Power Inductor



## LMXS Series – Shielded Style C

### HOW TO ORDER

<b>LM</b>	<b>XS</b>	<b>0707</b>	<b>M</b>	<b>R04</b>	<b>C</b>	<b>T</b>	<b>A</b>	<b>S</b>
↓	↓	↓	↓	↓	↓	↓	↓	↓
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	XS = Shielded	0707 = 7x7xh 07D7 = 7x7xD(h) 101B = 10x10xB(h) (h = see catalog)	M = ±20% N = ±30%	R04 = 0.039µH R39 = 0.390µH 3R9 = 3.900µH 390 = 39.00µH 391 = 390.0µH 392 = 3900µH		T = Sn Plate	A = Standard	S = 13" Reel

### ELECTRICAL CHARACTERISTICS

#### 0404/04B4/04C4

Codes	L (µH)	Tolerance	Test Condition	DCR (Ω) max.			I sat (A) max*		
				0404	04B4	04C4	0404	04B4	04C4
R47	0.47	N	100KHz, 0.25V	–	0.017	–	–	1.840	–
1R0	1.0	M, N	100KHz, 0.25V	0.060	0.030	–	1.600	1.800	–
1R2	1.2	M, N	100KHz, 0.25V	0.065	0.043	–	1.400	1.700	–
1R5	1.5	M, N	100KHz, 0.25V	0.077	0.052	0.015	1.240	1.600	1.900
1R8	1.8	M, N	100KHz, 0.25V	0.093	–	0.018	1.220	–	1.760
2R2	2.2	M, N	100KHz, 0.25V	0.125	0.058	0.020	1.200	1.500	1.670
2R4	2.4	M, N	100KHz, 0.25V	0.139	–	0.022	0.980	–	1.650
2R5	2.5	M, N	100KHz, 0.25V	–	0.059	–	–	1.400	–
2R7	2.7	M, N	100KHz, 0.25V	–	0.059	0.028	–	1.400	1.450
3R3	3.3	M, N	100KHz, 0.25V	0.187	0.064	0.032	0.890	1.300	1.440
3R5	3.5	M, N	100KHz, 0.25V	0.210	0.127	–	0.850	1.300	–
3R6	3.6	M, N	100KHz, 0.25V	–	–	0.035	–	–	1.430
3R9	3.9	M, N	100KHz, 0.25V	0.220	0.135	0.037	0.780	1.120	1.320
4R3	4.3	M, N	100KHz, 0.25V	–	–	0.043	–	–	1.000
4R7	4.7	M, N	100KHz, 0.25V	0.240	0.146	0.045	0.710	1.100	0.970
5R1	5.1	M, N	100KHz, 0.25V	–	–	0.046	–	–	0.940
5R6	5.6	M, N	100KHz, 0.25V	0.320	0.176	–	0.620	0.950	–
6R2	6.2	M, N	100KHz, 0.25V	–	0.220	–	–	0.910	–
6R8	6.8	M, N	100KHz, 0.25V	0.350	0.238	0.065	0.570	0.900	0.870
7R5	7.5	M, N	100KHz, 0.25V	–	–	0.079	–	–	0.820
8R2	8.2	M, N	100KHz, 0.25V	0.470	0.272	0.071	0.520	0.800	0.770
100	10	M	1KHz, 0.25V	0.570	0.299	0.105	0.470	0.700	0.700
120	12	M	1KHz, 0.25V	0.750	–	0.119	0.430	–	0.670
150	15	M	1KHz, 0.25V	0.810	0.472	0.140	0.380	0.610	0.540
180	18	M	1KHz, 0.25V	1.060	–	0.175	0.350	–	0.500
220	22	M	1KHz, 0.25V	1.150	0.592	0.201	0.320	0.520	0.480
270	27	M	1KHz, 0.25V	1.670	0.630	0.227	0.290	0.440	0.400
330	33	M	1KHz, 0.25V	1.840	1.075	0.287	0.280	0.430	0.350
390	39	M	1KHz, 0.25V	2.310	–	0.341	0.250	–	0.330
470	47	M	1KHz, 0.25V	2.630	1.309	0.430	0.220	0.340	0.320
560	56	M	1KHz, 0.25V	2.860	–	0.471	0.200	–	0.300
680	68	M	1KHz, 0.25V	3.940	2.613	0.532	0.180	0.250	0.270
820	82	M	1KHz, 0.25V	4.900	2.950	0.675	0.160	0.200	0.230
101	100	M	1KHz, 0.25V	5.740	3.255	0.850	0.140	0.190	0.210
121	120	M	1KHz, 0.25V	7.310	–	1.110	0.130	–	0.200
151	150	M	1KHz, 0.25V	9.080	3.550	1.230	0.120	0.120	0.170
181	180	M	1KHz, 0.25V	9.500	–	1.560	0.110	–	0.150
221	220	M	1KHz, 0.25V	–	4.900	1.800	–	0.090	0.140
271	270	M	1KHz, 0.25V	–	–	2.200	–	–	0.130
331	330	M	1KHz, 0.25V	–	7.280	2.640	–	0.080	0.120
471	470	M	1KHz, 0.25V	–	–	3.820	–	–	0.100
561	560	M	1KHz, 0.25V	–	–	4.620	–	–	0.090
681	680	M	1KHz, 0.25V	–	13.370	–	–	0.070	–
102	1000	M	1KHz, 0.25V	–	19.550	–	–	0.065	–
152	1500	M	1KHz, 0.25V	–	36.150	–	–	0.038	–
182	1800	M	1KHz, 0.25V	–	57.620	–	–	0.036	–

\*Saturation Current (0404/04B4): The DC current when the inductance becomes 30% lower than its initial value. (Ta=25°C)

\*Saturation Current (04C4): The DC current when the inductance becomes 35% lower than its initial value. (Ta=25°C)



# LMax SMD Power Inductor



## LMXS Series – Shielded Style C

### 0505/05B5/05C5

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.			I sat (A) max*		
				0505	05B5	05C5	0505	05B5	05C5
1R0	1.0	M, N	100KHz, 0.25V	–	0.030	0.015	–	2.700	4.000
1R1	1.1	M, N	100KHz, 0.25V	–	–	0.020	–	–	3.870
1R2	1.2	M, N	100KHz, 0.25V	0.050	0.044	0.022	1.770	2.150	3.800
1R5	1.5	M, N	100KHz, 0.25V	0.069	–	–	1.710	–	–
2R0	2.0	M, N	100KHz, 0.25V	0.100	0.046	0.027	1.440	1.900	2.920
2R2	2.2	M, N	100KHz, 0.25V	0.110	0.059	0.029	1.400	1.630	2.410
3R3	3.3	M, N	100KHz, 0.25V	0.140	0.062	0.034	1.140	1.500	2.360
3R5	3.5	M, N	100KHz, 0.25V	0.150	0.073	–	1.100	1.340	–
4R1	4.1	M, N	100KHz, 0.25V	–	0.081	–	–	1.200	–
4R7	4.7	M, N	100KHz, 0.25V	0.190	0.087	0.045	0.950	1.140	1.870
5R6	5.6	M, N	100KHz, 0.25V	0.193	0.093	0.052	0.900	1.000	1.600
6R2	6.2	M, N	100KHz, 0.25V	0.200	–	–	0.840	–	–
6R8	6.8	M, N	100KHz, 0.25V	0.200	0.105	0.068	0.800	0.950	1.510
8R2	8.2	M, N	100KHz, 0.25V	0.300	0.139	0.084	0.750	0.900	1.380
100	10	M	1KHz, 0.25V	0.350	0.150	0.090	0.660	0.760	1.330
120	12	M	1KHz, 0.25V	0.430	0.170	–	0.620	0.660	–
150	15	M	1KHz, 0.25V	0.440	0.210	0.142	0.590	0.630	1.050
180	18	M	1KHz, 0.25V	0.750	–	–	0.570	–	–
220	22	M	1KHz, 0.25V	0.820	0.275	0.208	0.560	0.560	0.860
270	27	M	1KHz, 0.25V	–	–	0.222	–	–	0.750
330	33	M	1KHz, 0.25V	1.160	0.455	0.257	0.430	0.440	0.720
390	39	M	1KHz, 0.25V	–	0.540	–	–	0.380	–
470	47	M	1KHz, 0.25V	1.590	0.730	0.352	0.340	0.350	0.620
560	56	M	1KHz, 0.25V	–	0.800	–	–	0.320	–
680	68	M	1KHz, 0.25V	2.140	0.935	0.525	0.290	0.300	0.510
820	82	M	1KHz, 0.25V	2.720	–	–	0.250	–	–
101	100	M	1KHz, 0.25V	3.550	1.500	0.801	0.220	0.230	0.430
121	120	M	1KHz, 0.25V	4.890	1.910	0.850	0.200	0.220	0.340
151	150	M	1KHz, 0.25V	5.200	2.680	1.100	0.190	0.210	0.260
181	180	M	1KHz, 0.25V	7.550	3.045	1.190	0.170	0.200	0.240
221	220	M	1KHz, 0.25V	7.760	3.520	1.530	0.150	0.195	0.200
271	270	M	1KHz, 0.25V	10.13	4.380	–	0.145	0.193	–
331	330	M	1KHz, 0.25V	11.23	5.560	2.030	0.140	0.190	0.190
391	390	M	1KHz, 0.25V	–	–	3.000	–	–	0.160
471	470	M	1KHz, 0.25V	16.86	7.820	3.500	0.098	0.180	0.150
561	560	M	1KHz, 0.25V	22.78	9.790	4.450	0.097	0.170	0.140
681	680	M	1KHz, 0.25V	24.87	–	–	0.085	–	–
821	820	M	1KHz, 0.25V	28.09	15.00	–	0.077	0.120	–
102	1000	M	1KHz, 0.25V	45.07	–	–	0.067	–	–
122	1200	M	1KHz, 0.25V	–	–	8.500	–	–	0.070
152	1500	M	1KHz, 0.25V	–	–	10.00	–	–	0.065
182	1800	M	1KHz, 0.25V	–	–	13.15	–	–	0.062
222	2200	M	1KHz, 0.25V	–	–	19.00	–	–	0.050
252	2500	M	1KHz, 0.25V	–	–	20.00	–	–	0.045

\*Saturation Current (0505/05B5/05C5): The DC current when the inductance becomes 30% lower than its initial value.

# LMax SMD Power Inductor



## LMXS Series – Shielded Style C

### 0707/07B7/07D7

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.			I sat (A) max*		
				0707	07B7	07D7	0707	07B7	07D7
R36	0.36	N	100KHz, 0.25V	–	–	0.005	–	–	9.240
R56	0.56	N	100KHz, 0.25V	–	–	0.006	–	–	8.500
R80	0.80	N	100KHz, 0.25V	–	–	0.009	–	–	5.800
1R0	1.0	M, N	100KHz, 0.25V	0.050	0.035	0.040	3.280	3.520	2.100
1R2	1.2	M, N	100KHz, 0.25V	–	–	0.040	–	–	2.100
1R5	1.5	M, N	100KHz, 0.25V	0.067	–	0.040	2.530	–	2.100
1R8	1.8	M, N	100KHz, 0.25V	–	0.052	0.040	–	3.050	2.090
2R0	2.0	M, N	100KHz, 0.25V	0.085	–	–	2.060	–	–
2R2	2.2	M, N	100KHz, 0.25V	–	0.071	0.0410	–	2.500	2.080
2R5	2.5	M, N	100KHz, 0.25V	–	–	0.0410	–	–	2.080
2R7	2.7	M, N	100KHz, 0.25V	0.110	–	–	1.870	–	–
3R0	3.0	M, N	100KHz, 0.25V	–	0.086	–	–	2.150	–
3R3	3.3	M, N	100KHz, 0.25V	0.130	–	0.0410	1.580	–	2.070
3R9	3.9	M, N	100KHz, 0.25V	0.160	0.110	–	1.460	2.010	–
4R3	4.3	M, N	100KHz, 0.25V	–	–	0.041	–	–	2.060
4R7	4.7	M, N	100KHz, 0.25V	0.200	0.130	0.042	1.300	1.950	2.050
5R6	5.6	M, N	100KHz, 0.25V	0.230	0.150	0.043	1.220	1.820	2.040
6R8	6.8	M, N	100KHz, 0.25V	0.280	0.170	0.044	1.160	1.670	2.040
8R2	8.2	M, N	100KHz, 0.25V	0.310	0.190	–	1.130	1.520	–
100	10	M	1KHz, 0.25V	0.330	0.240	0.049	1.030	1.390	2.000
120	12	M	1KHz, 0.25V	0.460	0.290	0.058	0.870	1.220	1.900
150	15	M	1KHz, 0.25V	0.530	0.380	0.081	0.800	1.090	1.600
180	18	M	1KHz, 0.25V	0.620	0.440	0.091	0.730	1.030	1.480
220	22	M	1KHz, 0.25V	0.700	0.490	0.110	0.710	0.950	1.320
270	27	M	1KHz, 0.25V	0.910	0.640	0.150	0.650	0.840	1.260
330	33	M	1KHz, 0.25V	1.150	0.740	0.170	0.570	0.800	1.100
390	39	M	1KHz, 0.25V	1.380	0.910	0.230	0.500	0.750	1.050
470	47	M	1KHz, 0.25V	1.540	1.020	0.260	0.480	0.690	1.000
560	56	M	1KHz, 0.25V	1.860	1.260	0.350	0.450	0.630	0.850
680	68	M	1KHz, 0.25V	2.320	1.570	0.380	0.410	0.560	0.780
820	82	M	1KHz, 0.25V	2.540	1.890	0.430	0.370	0.510	0.740
101	100	M	1KHz, 0.25V	3.20	2.12	0.61	0.32	0.47	0.70
121	120	M	1KHz, 0.25V	4.24	2.55	0.66	0.29	0.42	0.60
151	150	M	1KHz, 0.25V	4.77	3.37	0.88	0.27	0.37	0.52
181	180	M	1KHz, 0.25V	6.04	3.73	0.98	0.24	0.32	0.46
221	220	M	1KHz, 0.25V	7.95	4.54	1.17	0.22	0.29	0.40
271	270	M	1KHz, 0.25V	10.51	5.97	1.64	0.19	0.25	0.36
331	330	M	1KHz, 0.25V	11.63	7.74	1.86	0.18	0.23	0.32
391	390	M	1KHz, 0.25V	12.97	9.92	2.85	0.16	0.21	0.28
471	470	M	1KHz, 0.25V	16.87	12.95	3.01	0.15	0.18	0.26
561	560	M	1KHz, 0.25V	22.3	14.36	3.62	0.13	0.16	0.24
681	680	M	1KHz, 0.25V	25.11	18.52	4.63	0.12	0.14	0.22
821	820	M	1KHz, 0.25V	28.41	20.23	5.20	0.10	0.13	0.20
102	1000	M	1KHz, 0.25V	–	28.25	6.00	–	0.11	0.18
122	1200	M	1KHz, 0.25V	–	31.85	–	–	0.10	–
152	1500	M	1KHz, 0.25V	–	36.72	–	–	0.095	–

\*Saturation Current (0707/07B7/07D7): The DC current when the inductance becomes 30% lower than its initial value.

# LMax SMD Power Inductor



## LMXS Series – Shielded Style C

### 101B/101D/101H

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.			I sat (A) max*		
				101B	101D	101H	101B	101D	101H
R56	0.56	N	100KHz, 0.25V	–	0.006	0.006	–	12.60	10.18
R80	0.80	N	100KHz, 0.25V	–	0.006	–	–	12.00	–
1R0	1.0	M, N	100KHz, 0.25V	0.038	0.008	0.007	4.10	10.30	9.52
1R5	1.5	M, N	100KHz, 0.25V	–	0.0081	0.008	–	10.00	9.50
1R6	1.6	M, N	100KHz, 0.25V	–	–	0.008	–	–	9.50
1R8	1.8	M, N	100KHz, 0.25V	0.047	–	0.008	3.50	–	6.30
2R2	2.2	M, N	100KHz, 0.25V	–	0.01	0.009	–	8.00	5.82
2R4	2.4	M, N	100KHz, 0.25V	–	–	0.009	–	–	5.71
2R5	2.5	M, N	100KHz, 0.25V	–	0.011	–	–	7.50	–
2R7	2.7	M, N	100KHz, 0.25V	0.059	0.012	–	3.40	7.00	–
3R3	3.3	M, N	100KHz, 0.25V	0.063	0.012	0.010	3.00	6.60	5.18
3R8	3.8	M, N	100KHz, 0.25V	–	0.013	0.010	–	6.00	5.09
4R3	4.3	M, N	100KHz, 0.25V	–	–	0.011	–	–	5.08
4R7	4.7	M, N	100KHz, 0.25V	0.086	0.022	0.015	2.60	5.70	5.00
5R2	5.2	M, N	100KHz, 0.25V	–	0.022	0.016	–	5.50	3.25
5R6	5.6	M, N	100KHz, 0.25V	0.098	0.024	0.016	2.20	5.15	3.2
6R8	6.8	M, N	100KHz, 0.25V	0.110	0.026	0.017	2.10	4.90	2.80
7R0	7.0	M, N	100KHz, 0.25V	–	0.027	–	–	4.80	–
8R2	8.2	M, N	100KHz, 0.25V	0.130	0.032	–	1.90	4.45	–
100	10	M	1KHz, 0.25V	0.160	0.035	0.028	1.80	4.40	2.15
120	12	M	1KHz, 0.25V	0.190	0.040	–	1.48	3.65	–
150	15	M	1KHz, 0.25V	0.250	0.050	–	1.25	3.6	–
180	18	M	1KHz, 0.25V	0.290	0.060	–	1.22	2.95	–
220	22	M	1KHz, 0.25V	0.300	0.073	–	1.20	2.90	–
250	25	M	1KHz, 0.25V	–	0.080	–	–	2.60	–
270	27	M	1KHz, 0.25V	0.400	–	–	0.93	–	–
330	33	M	1KHz, 0.25V	0.460	0.093	–	0.89	2.30	–
390	39	M	1KHz, 0.25V	0.570	–	0.050	0.81	–	1.30
470	47	M	1KHz, 0.25V	0.630	0.128	–	0.80	2.10	–
560	56	M	1KHz, 0.25V	0.780	–	–	0.72	–	–
680	68	M	1KHz, 0.25V	0.990	0.213	–	0.64	1.50	–
820	82	M	1KHz, 0.25V	1.170	–	–	0.61	–	–
101	100	M	1KHz, 0.25V	1.30	0.304	–	0.60	1.35	–
121	120	M	1KHz, 0.25V	1.63	0.340	–	0.51	1.18	–
151	150	M	1KHz, 0.25V	2.02	0.506	–	0.43	1.15	–
181	180	M	1KHz, 0.25V	2.29	0.530	–	0.41	0.98	–
221	220	M	1KHz, 0.25V	2.96	0.756	–	0.36	0.92	–
271	270	M	1KHz, 0.25V	3.57	0.782	–	0.33	0.72	–
331	330	M	1KHz, 0.25V	4.50	1.090	–	0.30	0.70	–
391	390	M	1KHz, 0.25V	–	1.102	–	–	0.55	–
471	470	M	1KHz, 0.25V	6.16	1.292	–	0.25	0.45	–
561	560	M	1KHz, 0.25V	7.63	1.572	–	0.24	0.40	–
681	680	M	1KHz, 0.25V	9.06	1.882	–	0.21	0.35	–
821	820	M	1KHz, 0.25V	11.30	2.382	–	0.19	0.32	–
102	1000	M	1KHz, 0.25V	12.80	2.692	–	0.17	0.28	–
122	1200	M	1KHz, 0.25V	16.50	–	–	0.16	–	–
152	1500	M	1KHz, 0.25V	21.30	–	–	0.14	–	–
182	1800	M	1KHz, 0.25V	27.80	–	–	0.12	–	–
222	2200	M	1KHz, 0.25V	32.00	–	–	0.10	–	–

\*Saturation Current (1010/101D/101H): The DC current when the inductance becomes 35% lower than its initial value. (Ta=25°C)

# LMax SMD Power Inductor



## LMXS Series – Shielded Style D

### FEATURES

- Magnetically shielded against radiation
- 0704 can help achieve longer battery life significantly in handheld communication devices.
- 1309 / 1915 designed for the higher current requirements of portable computers.
- 0704 has ceramic base with gold-plating
- 1309 / 1915 has LCP plastic base

### APPLICATIONS

- Portable Telephones
- Personal Computers
- Other Various Electronic Appliances
- DC/DC Converters, etc.

### CHARACTERISTICS

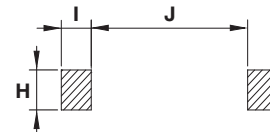
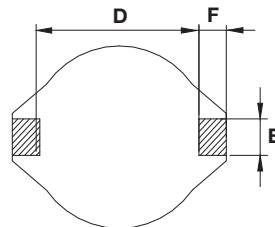
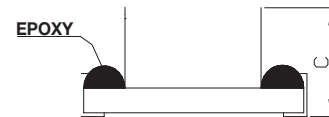
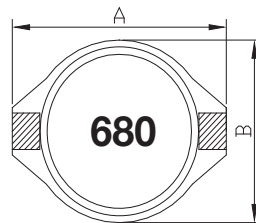
- Saturation Rated Current (IDC): The DC current when the inductance becomes 10% lower than its initial value. (Ta=25°C)
- Temperature Rise Current (I rms): The actual current when temperature of coil becomes Δ40°C. (Ta=25°C)
- Operating temperature range: -40 ~ 85°C

### INDUCTANCE AND RATED CURRENT RANGES

- 0704 1.0 ~ 10000μH 3.0 ~ 0.02A
- 1309 1.0 ~ 1000μH 5.0 ~ 0.17A
- 1915 10 ~ 1000μH 3.9 ~ 0.53A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A max.	B max.	C max.	D	E	F	H	I	J
0704	6.60 (0.260)	4.45 (0.175)	2.92 (0.115)	4.32 (0.170)	1.27 (0.050)	1.02 (0.040)	3.56 (0.140)	1.40 (0.055)	4.06 (0.160)
1309	12.95 (0.510)	9.40 (0.370)	5.21 (0.205)	7.62 (0.300)	2.54 (0.100)	2.54 (0.100)	2.79 (0.110)	2.92 (0.115)	7.37 (0.290)
1915	18.54 (0.730)	15.24 (0.600)	7.62 (0.300)	12.70 (0.500)	2.54 (0.100)	2.54 (0.100)	2.79 (0.110)	2.92 (0.115)	12.45 (0.490)

### HOW TO ORDER

<b>LM</b>   <b>Family</b> LM = Power Inductor	<b>XS</b>   <b>Series</b> XS = Shielded	<b>0704</b>   <b>Size</b> 0704 = 7x4xh 1309 = 13x9xh (h = see catalog)	<b>M</b>   <b>Tolerance</b> M = ±20%	<b>R04</b>   <b>Inductance</b> R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH	<b>D</b>   <b>Style</b>	<b>T</b>   <b>Termination</b> T = Sn Plate	<b>A</b>   <b>Special</b> A = Standard	<b>S</b>   <b>Packaging</b> S = 13" Reel
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# LMax SMD Power Inductor



## LMXS Series – Shielded Style D

### ELECTRICAL CHARACTERISTICS

#### 0704

Codes	L ( $\mu$ H)	Tolerance	Test Condition		DCR ( $\Omega$ ) max.	SRF ref (MHz)	Q min.	I rms (A) max.
			L	Q				
1R0	1.0	M	100KHz, 0.1V	200KHz, 0.1V	0.040	250	30	3.00
1R5	1.5	M	100KHz, 0.1V	200KHz, 0.1V	0.045	125	30	2.30
2R2	2.2	M	100KHz, 0.1V	200KHz, 0.1V	0.050	120	40	1.80
3R3	3.3	M	100KHz, 0.1V	200KHz, 0.1V	0.055	120	40	1.60
4R7	4.7	M	100KHz, 0.1V	200KHz, 0.1V	0.060	105	40	1.40
6R8	6.8	M	100KHz, 0.1V	200KHz, 0.1V	0.065	50	40	1.20
100	10	M	100KHz, 0.1V	200KHz, 0.1V	0.075	38	40	1.00
150	15	M	100KHz, 0.1V	100KHz, 0.1V	0.090	33	40	0.80
220	22	M	100KHz, 0.1V	100KHz, 0.1V	0.11	25	40	0.70
330	33	M	100KHz, 0.1V	100KHz, 0.1V	0.19	20	40	0.60
470	47	M	100KHz, 0.1V	100KHz, 0.1V	0.23	20	40	0.50
680	68	M	100KHz, 0.1V	100KHz, 0.1V	0.29	15	40	0.40
101	100	M	100KHz, 0.1V	100KHz, 0.1V	0.48	10	40	0.30
151	150	M	100KHz, 0.1V	100KHz, 0.1V	0.59	9	40	0.26
221	220	M	100KHz, 0.1V	100KHz, 0.1V	0.90	6	40	0.22
331	330	M	100KHz, 0.1V	100KHz, 0.1V	1.40	5	40	0.20
471	470	M	100KHz, 0.1V	100KHz, 0.1V	1.80	4	40	0.19
681	680	M	100KHz, 0.1V	100KHz, 0.1V	2.20	3	40	0.18
102	1000	M	100KHz, 0.1V	100KHz, 0.1V	3.40	2	40	0.15
152	1500	M	100KHz, 0.1V	100KHz, 0.1V	4.20	2	50	0.12
222	2200	M	100KHz, 0.1V	100KHz, 0.1V	8.50	2	50	0.10
332	3300	M	100KHz, 0.1V	100KHz, 0.1V	11.0	1	50	0.08
472	4700	M	100KHz, 0.1V	100KHz, 0.1V	13.9	1	50	0.06
682	6800	M	100KHz, 0.1V	100KHz, 0.1V	25.0	1	50	0.04
103	10000	M	100KHz, 0.1V	100KHz, 0.1V	32.8	0.8	50	0.02

#### 1309

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.	SRF ref (MHz)	IDC (A) max	I rms (A) max.
1R0	1.0	M	100KHz, 0.1V	0.021	140	5.6	5.0
1R5	1.5	M	100KHz, 0.1V	0.022	120	5.2	4.5
2R2	2.2	M	100KHz, 0.1V	0.032	80	5.0	3.8
3R3	3.3	M	100KHz, 0.1V	0.039	70	3.9	3.3
4R7	4.7	M	100KHz, 0.1V	0.054	40	3.2	2.7
6R8	6.8	M	100KHz, 0.1V	0.075	38	2.8	2.2
100	10	M	100KHz, 0.1V	0.101	35	2.4	2.0
150	15	M	100KHz, 0.1V	0.150	25	2.0	1.5
220	22	M	100KHz, 0.1V	0.207	19	1.6	1.3
330	33	M	100KHz, 0.1V	0.334	15	1.4	1.1
470	47	M	100KHz, 0.1V	0.472	13	1.0	0.8
680	68	M	100KHz, 0.1V	0.660	10	0.9	0.7
101	100	M	100KHz, 0.1V	1.110	7	0.8	0.6
151	150	M	100KHz, 0.1V	1.550	6	0.6	0.5
221	220	M	100KHz, 0.1V	2.000	5	0.5	0.37
102	1000	M	100KHz, 0.1V	8.300	2	0.32	0.17

# LMax SMD Power Inductor



## LMXS Series – Shielded Style D

1915

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.	SRF ref (MHz)	IDC (A) max.	I rms (A) max.
100	10	M	100KHz, 0.1V	0.040	30	8.0	3.9
150	15	M	100KHz, 0.1V	0.048	20	7.00	3.4
220	22	M	100KHz, 0.1V	0.059	18	6.00	3.1
330	33	M	100KHz, 0.1V	0.075	14	5.00	2.8
470	47	M	100KHz, 0.1V	0.097	10	4.00	2.4
680	68	M	100KHz, 0.1V	0.138	9.0	3.00	2.0
101	100	M	100KHz, 0.1V	0.207	7.0	2.40	1.7
151	150	M	100KHz, 0.1V	0.293	6.0	2.10	1.3
221	220	M	100KHz, 0.1V	0.470	5.0	1.90	1.1
331	330	M	100KHz, 0.1V	0.780	4.0	1.10	0.86
471	470	M	100KHz, 0.1V	1.080	3.0	1.10	0.73
681	680	M	100KHz, 0.1V	1.400	2.5	0.96	0.64
102	1000	M	100KHz, 0.1V	2.010	2.0	0.80	0.53



# LMax SMD Power Inductor



## LMXS Series – Shielded Style F

### FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

### APPLICATIONS

- Telephones
- PCs
- Notebooks
- Hard Disk Drives
- Peripherals

### CHARACTERISTICS

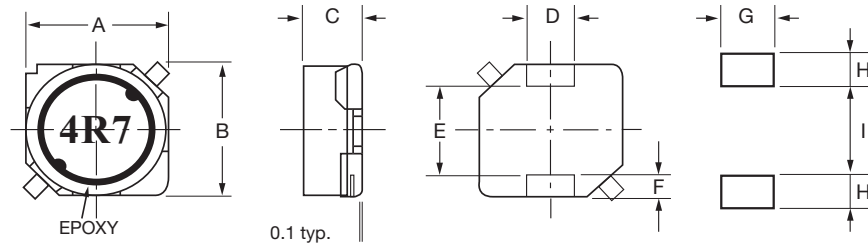
- Rated Current (IDC): The DC current that will cause an approximate  $\Delta T$  of 40°C. ( $T_a=25^\circ\text{C}$ )
- Operating temperature range:  $-40^\circ\text{C} \sim +125^\circ\text{C}$

### INDUCTANCE AND RATED CURRENT RANGES

- 0606 4.7 $\mu\text{H}$  ~ 100.0 $\mu\text{H}$  1.50 ~ 0.33A
- 06C6 4.7 $\mu\text{H}$  ~ 100.0 $\mu\text{H}$  1.60 ~ 0.42A
- 0707 3.3 $\mu\text{H}$  ~ 47.0 $\mu\text{H}$  1.60 ~ 0.54A
- 07C7 3.3 $\mu\text{H}$  ~ 1000.0 $\mu\text{H}$  1.90 ~ 0.13A
- 07E7 3.3 $\mu\text{H}$  ~ 1000.0 $\mu\text{H}$  2.30 ~ 0.14A
- 1010 10.0 $\mu\text{H}$  ~ 1500.0 $\mu\text{H}$  2.50 ~ 0.22A
- 1313 6.0 $\mu\text{H}$  ~ 1500.0 $\mu\text{H}$  3.60 ~ 0.29A
- 131H 2.0 $\mu\text{H}$  ~ 220.0 $\mu\text{H}$  6.20 ~ 1.00A
- 131J 1.2 $\mu\text{H}$  ~ 220.0 $\mu\text{H}$  8.20 ~ 1.30A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A	B	C	D	E	F	G	H	I
0606	6.00 ± 0.20 (0.236 ± 0.008)	6.00 ± 0.20 (0.236 ± 0.008)	2.50 ± 0.20 (0.099 ± 0.008)	2.00 ± 0.10 (0.079 ± 0.004)	3.00 typ (0.118 typ)	1.50 typ (0.059 typ)	2.20 (0.087)	2.00 (0.079)	2.60 (0.103)
06C6	6.00 ± 0.20 (0.236 ± 0.008)	6.00 ± 0.20 (0.236 ± 0.008)	2.80 ± 0.20 (0.110 ± 0.008)	2.00 ± 0.10 (0.079 ± 0.004)	3.00 typ (0.118 typ)	1.50 typ (0.059 typ)	2.20 (0.087)	2.00 (0.079)	2.60 (0.103)
0707	7.00 ± 0.20 (0.276 ± 0.008)	7.00 ± 0.20 (0.276 ± 0.008)	2.80 ± 0.20 (0.110 ± 0.008)	2.00 ± 0.10 (0.079 ± 0.004)	4.00 typ (0.193 typ)	1.50 typ (0.059 typ)	2.20 (0.087)	2.00 (0.079)	3.60 (0.103)
07C7	7.00 ± 0.20 (0.276 ± 0.008)	7.00 ± 0.20 (0.276 ± 0.008)	3.20 ± 0.20 (0.126 ± 0.008)	2.00 ± 0.10 (0.079 ± 0.004)	4.00 typ (0.193 typ)	1.50 typ (0.059 typ)	2.20 (0.087)	2.00 (0.079)	3.60 (0.142)
07E7	7.00 ± 0.20 (0.276 ± 0.008)	7.00 ± 0.20 (0.276 ± 0.008)	4.50 ± 0.30 (0.177 ± 0.012)	2.00 ± 0.10 (0.079 ± 0.004)	4.00 typ (0.193 typ)	1.50 typ (0.059 typ)	2.20 (0.087)	2.00 (0.079)	3.60 (0.142)
1010	10.1 ± 0.30 (0.398 ± 0.012)	10.1 ± 0.30 (0.398 ± 0.012)	4.50 ± 0.30 (0.177 ± 0.012)	3.00 ± 0.10 (0.118 ± 0.004)	6.00 ± 0.20 (0.236 ± 0.008)	2.00 ± 0.15 (0.079 ± 0.006)	3.20 (0.126)	2.50 (0.099)	5.60 (0.220)
1313	12.5 ± 0.30 (0.492 ± 0.012)	12.5 ± 0.30 (0.492 ± 0.012)	5.50 ± 0.30 (0.217 ± 0.012)	3.00 ± 0.10 (0.118 ± 0.004)	8.60 ± 0.30 (0.339 ± 0.012)	2.00 ± 0.15 (0.079 ± 0.006)	3.20 (0.126)	2.50 (0.099)	8.20 (0.322)
131H	12.5 ± 0.30 (0.492 ± 0.012)	12.5 ± 0.30 (0.492 ± 0.012)	6.50 ± 0.35 (0.256 ± 0.014)	3.00 ± 0.10 (0.118 ± 0.004)	8.60 ± 0.30 (0.339 ± 0.012)	2.00 ± 0.15 (0.079 ± 0.006)	3.20 (0.126)	2.50 (0.099)	8.20 (0.322)
131J	12.5 ± 0.30 (0.492 ± 0.012)	12.5 ± 0.30 (0.492 ± 0.012)	7.50 ± 0.35 (0.295 ± 0.014)	3.00 ± 0.10 (0.118 ± 0.004)	8.60 ± 0.30 (0.339 ± 0.012)	2.00 ± 0.15 (0.079 ± 0.006)	3.20 (0.126)	2.50 (0.099)	8.20 (0.322)

### HOW TO ORDER

<b>LM</b>	<b>XS</b>	<b>0707</b>	<b>M</b>	<b>2R2</b>	<b>F</b>	<b>T</b>	<b>A</b>	<b>S</b>
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	XS = Shielded	0707 = 7x7xh 07C7 = 7x7xC(h) (h = see catalog)	M = ±20%	2R2 = 2.20 $\mu\text{H}$ 680 = 68.0 $\mu\text{H}$ 152 = 1500 $\mu\text{H}$		T = Sn Plate	A = Standard	S = 13" Reel



# LMax SMD Power Inductor



## LMXS Series – Shielded Style F

### ELECTRICAL CHARACTERISTICS

#### 0606

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
4R7	4.7	M	100KHz, 1.0V	0.050	1.50
6R8	6.8	M	100KHz, 1.0V	0.080	1.30
100	10	M	100KHz, 1.0V	0.098	1.00
150	15	M	100KHz, 1.0V	0.140	0.88
220	22	M	100KHz, 1.0V	0.208	0.73
330	33	M	100KHz, 1.0V	0.310	0.59
470	47	M	100KHz, 1.0V	0.390	0.48
680	68	M	100KHz, 1.0V	0.540	0.42
101	100	M	100KHz, 1.0V	0.810	0.33

#### 06C6

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
4R7	4.7	M	100KHz, 1.0V	0.050	1.60
6R8	6.8	M	100KHz, 1.0V	0.073	1.50
100	10	M	100KHz, 1.0V	0.098	1.30
150	15	M	100KHz, 1.0V	0.128	1.00
220	22	M	100KHz, 1.0V	0.172	0.77
330	33	M	100KHz, 1.0V	0.290	0.69
470	47	M	100KHz, 1.0V	0.420	0.59
680	68	M	100KHz, 1.0V	0.533	0.50
101	100	M	100KHz, 1.0V	0.730	0.42

#### 0707

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
3R3	3.3	M	100KHz, 1.0V	0.045	1.60
4R7	4.7	M	100KHz, 1.0V	0.054	1.50
6R8	6.8	M	100KHz, 1.0V	0.071	1.30
100	10	M	100KHz, 1.0V	0.100	1.10
150	15	M	100KHz, 1.0V	0.156	0.88
220	22	M	100KHz, 1.0V	0.220	0.75
330	33	M	100KHz, 1.0V	0.290	0.65
470	47	M	100KHz, 1.0V	0.410	0.54

#### 07C7

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
3R3	3.3	M	100KHz, 1.0V	0.028	1.90
4R7	4.7	M	100KHz, 1.0V	0.044	1.70
6R8	6.8	M	100KHz, 1.0V	0.050	1.60
100	10	M	100KHz, 1.0V	0.064	1.40
150	15	M	100KHz, 1.0V	0.090	1.10
220	22	M	100KHz, 1.0V	0.132	0.96
330	33	M	100KHz, 1.0V	0.192	0.75
470	47	M	100KHz, 1.0V	0.290	0.67
680	68	M	100KHz, 1.0V	0.372	0.59
101	100	M	100KHz, 1.0V	0.540	0.45
151	150	M	100KHz, 1.0V	0.780	0.37
221	220	M	100KHz, 1.0V	1.260	0.29
331	330	M	100KHz, 1.0V	2.000	0.22
471	470	M	100KHz, 1.0V	2.460	0.20
681	680	M	100KHz, 1.0V	3.780	0.16
102	1000	M	100KHz, 1.0V	5.740	0.13

# LMax SMD Power Inductor



## LMXS Series – Shielded Style F

### 07E7

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
3R3	3.3	M	100KHz, 1.0V	0.024	2.30
4R7	4.7	M	100KHz, 1.0V	0.036	2.00
6R8	6.8	M	100KHz, 1.0V	0.047	1.70
100	10	M	100KHz, 1.0V	0.045	1.30
150	15	M	100KHz, 1.0V	0.063	1.10
220	22	M	100KHz, 1.0V	0.075	0.90
330	33	M	100KHz, 1.0V	0.120	0.82
470	47	M	100KHz, 1.0V	0.150	0.75
680	68	M	100KHz, 1.0V	0.210	0.60
101	100	M	100KHz, 1.0V	0.300	0.50
151	150	M	100KHz, 1.0V	0.410	0.40
221	220	M	100KHz, 1.0V	0.624	0.33
331	330	M	100KHz, 1.0V	0.890	0.25
471	470	M	100KHz, 1.0V	1.260	0.22
681	680	M	100KHz, 1.0V	1.780	0.20
102	1000	M	100KHz, 1.0V	2.740	0.14

### 1010

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
100	10	M	100KHz, 1.0V	0.044	2.50
150	15	M	100KHz, 1.0V	0.057	2.20
220	22	M	100KHz, 1.0V	0.071	1.90
330	33	M	100KHz, 1.0V	0.100	1.60
470	47	M	100KHz, 1.0V	0.120	1.40
680	68	M	100KHz, 1.0V	0.170	1.20
101	100	M	100KHz, 1.0V	0.240	1.00
151	150	M	100KHz, 1.0V	0.420	0.79
221	220	M	100KHz, 1.0V	0.570	0.65
331	330	M	100KHz, 1.0V	0.820	0.54
471	470	M	100KHz, 1.0V	1.240	0.47
681	680	M	100KHz, 1.0V	1.920	0.38
102	1000	M	100KHz, 1.0V	3.360	0.29
152	1500	M	100KHz, 1.0V	4.080	0.22

### 1313

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
6R0	6	M	100KHz, 1.0V	0.020	3.60
100	10	M	100KHz, 1.0V	0.026	3.40
150	15	M	100KHz, 1.0V	0.032	2.80
220	22	M	100KHz, 1.0V	0.041	2.30
330	33	M	100KHz, 1.0V	0.050	1.90
470	47	M	100KHz, 1.0V	0.075	1.60
680	68	M	100KHz, 1.0V	0.100	1.30
101	100	M	100KHz, 1.0V	0.140	1.10
151	150	M	100KHz, 1.0V	0.230	0.88
221	220	M	100KHz, 1.0V	0.330	0.72
331	330	M	100KHz, 1.0V	0.500	0.59
471	470	M	100KHz, 1.0V	0.630	0.49
681	680	M	100KHz, 1.0V	0.920	0.43
102	1000	M	100KHz, 1.0V	1.350	0.34
152	1500	M	100KHz, 1.0V	2.080	0.29

# LMax SMD Power Inductor



## LMXS Series – Shielded Style F

### 131H

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
2R0	2.0	M	100KHz,1.0V	0.014	6.20
4R2	4.2	M	100KHz,1.0V	0.018	5.50
7R0	7.0	M	100KHz,1.0V	0.022	5.00
100	10	M	100KHz,1.0V	0.025	4.80
150	15	M	100KHz,1.0V	0.029	4.20
220	22	M	100KHz,1.0V	0.038	3.50
330	33	M	100KHz,1.0V	0.049	2.80
470	47	M	100KHz,1.0V	0.070	2.40
680	68	M	100KHz,1.0V	0.095	2.00
101	100	M	100KHz,1.0V	0.150	1.60
221	220	M	100KHz,1.0V	0.330	1.00

### 131J

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
1R2	1.2	M	100KHz,1.0V	0.009	8.20
2R7	2.7	M	100KHz,1.0V	0.012	7.00
3R9	3.9	M	100KHz,1.0V	0.013	6.70
5R6	5.6	M	100KHz,1.0V	0.014	6.30
6R8	6.8	M	100KHz,1.0V	0.016	5.90
100	10	M	100KHz,1.0V	0.019	5.40
150	15	M	100KHz,1.0V	0.022	4.70
220	22	M	100KHz,1.0V	0.032	4.00
330	33	M	100KHz,1.0V	0.048	3.20
470	47	M	100KHz,1.0V	0.064	2.70
680	68	M	100KHz,1.0V	0.094	2.00
101	100	M	100KHz,1.0V	0.150	1.90
151	150	M	100KHz,1.0V	0.210	1.50
221	220	M	100KHz,1.0V	0.310	1.30

# LMax SMD Power Inductor



## LMXS Series – Shielded Style G

### FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

### APPLICATIONS

- LCD Televisions
- Notebooks
- Handheld Communication
- DC/DC Converters, etc.

### CHARACTERISTICS

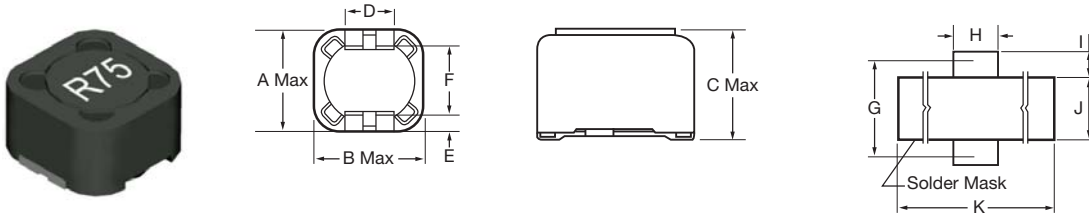
- Rated Current (IDC): The DC current that will cause an approximate  $\Delta T$  of 40°C. ( $T_a=25^\circ\text{C}$ )
- Operating temperature range:  $-40^\circ\text{C} \sim +125^\circ\text{C}$

### INDUCTANCE AND RATED CURRENT RANGES

- 0707 10 $\mu\text{H}$  ~ 1000 $\mu\text{H}$  1.68 ~ 0.16A
- 07D7 10 $\mu\text{H}$  ~ 1000 $\mu\text{H}$  1.84 ~ 0.18A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A max.	B max.	C max.	D	E	F	G	H	I	J	K
0707	7.50 (0.295)	7.50 (0.295)	3.50 (0.138)	2.00 (0.079)	1.10 (0.043)	5.08 (0.200)	6.30 (0.248)	3.00 (0.118)	1.91 (0.075)	4.50 (0.177)	10.5 (0.413)
07D7	7.50 (0.295)	7.50 (0.295)	4.50 (0.177)	2.00 (0.079)	1.10 (0.043)	5.08 (0.200)	6.30 (0.248)	3.00 (0.118)	1.91 (0.075)	4.50 (0.177)	10.5 (0.413)

### HOW TO ORDER

<b>LM</b>	<b>XS</b>	<b>0707</b>	<b>M</b>	<b>R04</b>	<b>G</b>	<b>T</b>	<b>A</b>	<b>S</b>
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	XS = Shielded	0707 = 7x7xh 07C7 = 7x7xC(h) (h = see catalog)	M = $\pm 20\%$	3R9 = 3.900 $\mu\text{H}$ 390 = 39.00 $\mu\text{H}$ 391 = 390 $\mu\text{H}$ 102 = 1000 $\mu\text{H}$		T = Sn Plate	A = Standard	S = 13" Reel

# LMax SMD Power Inductor



## LMXS Series – Shielded Style G

### ELECTRICAL CHARACTERISTICS

#### 0707

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
100	10	M	100KHz, 1.0V	0.072	1.68
120	12	M	100KHz, 1.0V	0.098	1.52
150	15	M	100KHz, 1.0V	0.130	1.33
180	18	M	100KHz, 1.0V	0.140	1.20
220	22	M	100KHz, 1.0V	0.190	1.07
270	27	M	100KHz, 1.0V	0.210	0.96
330	33	M	100KHz, 1.0V	0.240	0.91
390	39	M	100KHz, 1.0V	0.320	0.77
470	47	M	100KHz, 1.0V	0.360	0.76
560	56	M	100KHz, 1.0V	0.470	0.68
680	68	M	100KHz, 1.0V	0.520	0.61
820	82	M	100KHz, 1.0V	0.690	0.57
101	100	M	100KHz, 1.0V	0.790	0.50
121	120	M	100KHz, 1.0V	0.890	0.49
151	150	M	100KHz, 1.0V	1.270	0.43
181	180	M	100KHz, 1.0V	1.450	0.39
221	220	M	100KHz, 1.0V	1.650	0.35
271	270	M	100KHz, 1.0V	2.310	0.32
331	330	M	100KHz, 1.0V	2.620	0.28
391	390	M	100KHz, 1.0V	2.940	0.26
471	470	M	100KHz, 1.0V	4.180	0.24
561	560	M	100KHz, 1.0V	4.670	0.22
681	680	M	100KHz, 1.0V	5.730	0.19
821	820	M	100KHz, 1.0V	6.540	0.18
102	1000	M	100KHz, 1.0V	9.440	0.16

#### 07D7

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
100	10	M	100KHz, 1.0V	0.060	1.84
120	12	M	100KHz, 1.0V	0.070	1.71
150	15	M	100KHz, 1.0V	0.081	1.47
180	18	M	100KHz, 1.0V	0.091	1.31
220	22	M	100KHz, 1.0V	0.110	1.23
270	27	M	100KHz, 1.0V	0.150	1.12
330	33	M	100KHz, 1.0V	0.170	0.96
390	39	M	100KHz, 1.0V	0.230	0.91
470	47	M	100KHz, 1.0V	0.260	0.88
560	56	M	100KHz, 1.0V	0.350	0.75
680	68	M	100KHz, 1.0V	0.380	0.69
820	82	M	100KHz, 1.0V	0.430	0.61
101	100	M	100KHz, 1.0V	0.610	0.60
121	120	M	100KHz, 1.0V	0.660	0.52
151	150	M	100KHz, 1.0V	0.880	0.46
181	180	M	100KHz, 1.0V	0.980	0.42
221	220	M	100KHz, 1.0V	1.170	0.36
271	270	M	100KHz, 1.0V	1.640	0.34
331	330	M	100KHz, 1.0V	1.860	0.32
391	390	M	100KHz, 1.0V	2.850	0.29
561	560	M	100KHz, 1.0V	3.620	0.23
681	680	M	100KHz, 1.0V	4.630	0.22
821	820	M	100KHz, 1.0V	5.200	0.20
102	1000	M	100KHz, 1.0V	6.000	0.18

# LMax SMD Power Inductor



## LMXS Series – Shielded Style H

### FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

### APPLICATIONS

- LCD Televisions
- Notebooks
- Handheld Communication
- DC/DC Converters, etc.

### CHARACTERISTICS

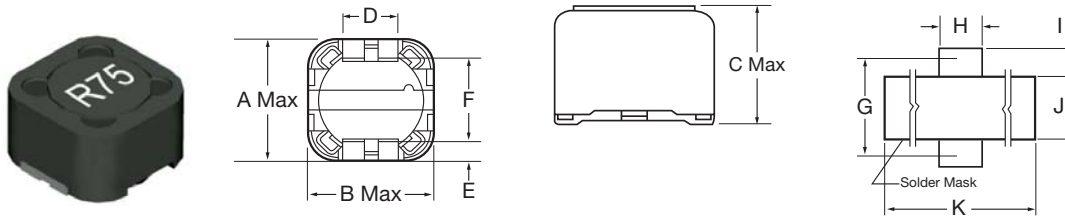
- Rated Current (IDC): The DC Current that will cause a drop in inductance value of approximately 20%.
- Operating temperature range: -40°C ~ +125°C

### INDUCTANCE AND RATED CURRENT RANGES

- 1212 3.9μH ~ 330μH 6.5 ~ 0.50A
- 121G 2.4μH ~ 47μH 8.0 ~ 2.5A
- 121J 10μH ~ 1000μH 4.0 ~ 0.40A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A max.	B max.	C max.	D	E	F	G	H	I	J	K
1212	12.5 (0.492)	12.5 (0.492)	4.50 (0.177)	5.00 (0.197)	2.00 (0.079)	7.60 (0.299)	10.00 (0.393)	6.00 (0.236)	3.00 (0.118)	7.00 (0.276)	18.0 (0.709)
121G	12.5 (0.492)	12.5 (0.492)	6.20 (0.244)	5.00 (0.197)	2.00 (0.079)	7.60 (0.299)	10.00 (0.394)	6.00 (0.236)	3.00 (0.118)	7.00 (0.276)	18.0 (0.709)
121J	12.5 (0.492)	12.5 (0.492)	8.00 (0.315)	5.00 (0.197)	2.00 (0.079)	7.60 (0.299)	10.00 (0.394)	6.00 (0.236)	3.00 (0.118)	7.00 (0.276)	18.0 (0.709)

### HOW TO ORDER

<b>LM</b>	<b>XS</b>	<b>1212</b>	<b>M</b>	<b>R04</b>	<b>H</b>	<b>T</b>	<b>A</b>	<b>S</b>
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	XS = Shielded	1212 = 12x12xh 121G = 12x12xG(h) (h = see catalog)	M = ±20%	3R9 = 3.900μH 390 = 39.00μH 391 = 390μH 102 = 1000μH		T = Sn Plate	A = Standard	S = 13" Reel

# LMax SMD Power Inductor



## LMXS Series – Shielded Style H

### ELECTRICAL CHARACTERISTICS

#### 1212

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
3R9	3.9	M	100KHz, 1.0V	0.015	6.50
4R7	4.7	M	100KHz, 1.0V	0.018	5.70
6R8	6.8	M	100KHz, 1.0V	0.023	4.90
100	10	M	100KHz, 1.0V	0.028	4.50
120	12	M	100KHz, 1.0V	0.038	4.00
150	15	M	100KHz, 1.0V	0.050	3.20
180	18	M	100KHz, 1.0V	0.057	3.10
220	22	M	100KHz, 1.0V	0.066	2.90
270	27	M	100KHz, 1.0V	0.080	2.80
330	33	M	100KHz, 1.0V	0.097	2.70
390	39	M	100KHz, 1.0V	0.132	2.10
470	47	M	100KHz, 1.0V	0.150	1.90
560	56	M	100KHz, 1.0V	0.190	1.80
680	68	M	100KHz, 1.0V	0.220	1.50
820	82	M	100KHz, 1.0V	0.260	1.30
101	100	M	100KHz, 1.0V	0.308	1.20
121	120	M	100KHz, 1.0V	0.380	1.10
151	150	M	100KHz, 1.0V	0.530	0.95
181	180	M	100KHz, 1.0V	0.620	0.85
221	220	M	100KHz, 1.0V	0.700	0.80
271	270	M	100KHz, 1.0V	0.876	0.60
331	330	M	100KHz, 1.0V	0.990	0.50

#### 121G

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
100	10	M	100KHz, 1.0V	0.025	4.00
120	12	M	100KHz, 1.0V	0.027	3.50
150	15	M	100KHz, 1.0V	0.030	3.30
180	18	M	100KHz, 1.0V	0.038	3.00
220	22	M	100KHz, 1.0V	0.045	2.80
270	27	M	100KHz, 1.0V	0.055	2.30
330	33	M	100KHz, 1.0V	0.063	2.10
390	39	M	100KHz, 1.0V	0.075	2.00
470	47	M	100KHz, 1.0V	0.085	1.80
560	56	M	100KHz, 1.0V	0.110	1.70
680	68	M	100KHz, 1.0V	0.120	1.50
820	82	M	100KHz, 1.0V	0.140	1.040
101	100	M	100KHz, 1.0V	0.165	1.30
121	120	M	100KHz, 1.0V	0.195	1.10
151	150	M	100KHz, 1.0V	0.250	1.00
181	180	M	100KHz, 1.0V	0.290	0.90
221	220	M	100KHz, 1.0V	0.0400	0.80
271	270	M	100KHz, 1.0V	0.0460	0.75
331	330	M	100KHz, 1.0V	0.510	0.68
391	390	M	100KHz, 1.0V	0.690	0.65
471	470	M	100KHz, 1.0V	0.770	0.58
561	560	M	100KHz, 1.0V	0.880	0.54
681	680	M	100KHz, 1.0V	1.200	0.048
821	820	M	100KHz, 1.0V	1.340	0.043
102	1000	M	100KHz, 1.0V	1.530	0.040



# LMax SMD Power Inductor



## LMXS Series – Shielded Style H

### 121J

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.	IDC (A) max.
2R4	2.4	M	100KHz, 1.0V	0.012	8.00
4R7	4.7	M	100KHz, 1.0V	0.016	6.80
7R6	7.6	M	100KHz, 1.0V	0.020	5.90
100	10	M	100KHz, 1.0V	0.022	5.40
120	12	M	100KHz, 1.0V	0.025	4.90
150	15	M	100KHz, 1.0V	0.027	4.50
180	18	M	100KHz, 1.0V	0.039	3.90
220	22	M	100KHz, 1.0V	0.043	3.60
270	27	M	100KHz, 1.0V	0.046	3.40
330	33	M	100KHz, 1.0V	0.065	3.00
390	39	M	100KHz, 1.0V	0.073	2.75
470	47	M	100KHz, 1.0V	0.100	2.50

# LMax SMD Power Inductor



## LMXS Series – Shielded Style J

### FEATURES

- Directly connected electrode on ferrite core
- High power, High saturation inductors
- Ideal inductors for DC/DC converters
- Magnetically shielded against radiation
- Available on tape and reel for automatic surface mounting

### APPLICATIONS

- Power Supply for VTRs
- LCD Televisions
- Notebook PCs
- Portable Communication
- DC/DC Converters, etc.

### CHARACTERISTICS

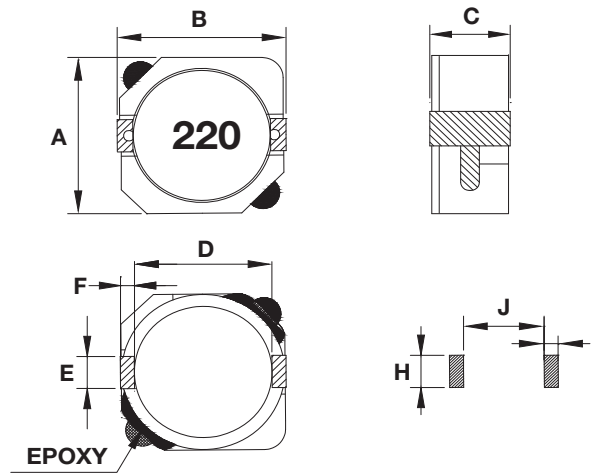
- Rated DC current: The current when the inductance becomes 35% lower than its initial value or the actual current when the temperature of coil increases to  $\Delta T=40^{\circ}\text{C}$ . The smaller one is defined as Rated DC Current. ( $T_a=25^{\circ}\text{C}$ )
- Operating temperature range:  $-40 \sim 85^{\circ}\text{C}$

### INDUCTANCE AND RATED CURRENT RANGES

- 0606 2.5 ~ 100 $\mu\text{H}$  2.60 ~ 0.40A
- 1010 10 ~ 150 $\mu\text{H}$  2.70 ~ 0.70A
- 101D 1.3 ~ 330 $\mu\text{H}$  10.0 ~ 0.70A
- 101E 1.5 ~ 1000 $\mu\text{H}$  10.5 ~ 0.35A
- Electrical specifications at  $25^{\circ}\text{C}$



### DIMENSIONS



mm (inches)

Type	A max.	B max.	C max.	D	E	F	H	I	J
0606	6.20 (0.244)	6.30 (0.248)	3.00 (0.118)	4.70 (0.185)	2.00 (0.079)	0.60 (0.024)	2.60 (0.102)	1.00 (0.039)	4.60 (0.181)
1010	10.3 (0.406)	10.4 (0.409)	3.10 (0.122)	7.70 (0.303)	3.00 (0.118)	1.20 (0.047)	3.20 (0.126)	1.60 (0.063)	7.30 (0.287)
101D	10.3 (0.406)	10.4 (0.409)	4.00 (0.157)	7.70 (0.303)	3.00 (0.118)	1.20 (0.047)	3.20 (0.126)	1.60 (0.063)	7.30 (0.287)
101E	10.3 (0.406)	10.4 (0.409)	5.00 (0.197)	7.70 (0.303)	3.00 (0.118)	1.20 (0.047)	3.20 (0.126)	1.60 (0.063)	7.30 (0.287)

### HOW TO ORDER

<b>LM</b>	<b>XS</b>	<b>0606</b>	<b>N</b>	<b>R04</b>	<b>J</b>	<b>T</b>	<b>A</b>	<b>S</b>
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	XS = Shielded	0606 = 6x6xh 1010 = 10x10xh 101D = 10x10xD(h) (h = see catalog)	N = $\pm 30\%$	R04 = 0.039 $\mu\text{H}$ R39 = 0.390 $\mu\text{H}$ 3R9 = 3.900 $\mu\text{H}$ 390 = 39.00 $\mu\text{H}$ 391 = 390.0 $\mu\text{H}$ 392 = 3900 $\mu\text{H}$	J = Standard	T = Sn Plate	A = Standard	S = 13" Reel



# LMax SMD Power Inductor



## LMXS Series – Shielded Style J

### 0606/1010/101D/101E

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR (m $\Omega$ ) max.				IDC (A) max.			
				0606	1010	101D	101E	0606	1010	101D	101E
1R3	1.3	N	100KHz, 0.1V	–	–	8	–	–	–	10.0	–
1R5	1.5	N	100KHz, 0.1V	–	–	8	6	–	–	10.0	10.5
2R2	2.2	N	100KHz, 0.1V	–	–	11	7	–	–	8.00	9.25
2R5	2.5	N	100KHz, 0.1V	17.6	–	12	–	2.60	–	7.50	–
3R3	3.3	N	100KHz, 0.1V	20.3	–	13	10	2.30	–	6.50	7.80
3R8	3.8	N	100KHz, 0.1V	–	–	17	–	–	–	6.00	–
4R0	4.0	N	100KHz, 0.1V	27.0	–	–	–	2.10	–	–	–
4R7	4.7	N	100KHz, 0.1V	–	–	21	12	–	–	5.70	6.40
5R0	5.0	N	100KHz, 0.1V	31.1	–	–	–	1.85	–	–	–
5R2	5.2	N	100KHz, 0.1V	–	–	22	–	–	–	5.50	–
5R6	5.6	N	100KHz, 0.1V	–	–	25	–	–	–	5.20	–
6R0	6.0	N	100KHz, 0.1V	41.9	–	–	–	1.70	–	–	–
6R8	6.8	N	100KHz, 0.1V	–	–	26	18	–	–	4.90	5.40
7R0	7.0	N	100KHz, 0.1V	–	–	27	–	–	–	4.80	–
8R0	8.0	N	100KHz, 0.1V	49.9	–	–	–	1.50	–	–	–
8R2	8.2	N	100KHz, 0.1V	–	–	–	20	–	–	–	4.85
100	10	N	100KHz, 0.1V	54.0	58	35	26	1.30	2.70	4.40	3.45
120	12	N	100KHz, 0.1V	71.6	72	–	33	1.20	2.25	–	3.40
150	15	N	100KHz, 0.1V	82.4	86	50	41	1.10	2.22	3.60	2.83
180	18	N	100KHz, 0.1V	101.5	116	–	46	1.05	1.90	–	2.62
220	22	N	100KHz, 0.1V	119.0	145	73	61	0.95	1.78	2.90	2.44
270	27	N	100KHz, 0.1V	146.0	176	83	69	0.85	1.63	2.80	2.24
330	33	N	100KHz, 0.1V	182.5	213	93	84	0.76	1.46	2.30	1.88
390	39	N	100KHz, 0.1V	209.5	270	–	106	0.68	1.32	–	1.70
470	47	N	100KHz, 0.1V	229.5	299	128	130	0.60	1.18	2.10	1.56
560	56	N	100KHz, 0.1V	305.0	335	–	149	0.55	1.10	–	1.39
680	68	N	100KHz, 0.1V	351.0	451	213	201	0.48	1.04	1.50	1.36
820	82	N	100KHz, 0.1V	418.5	513	–	227	0.45	0.94	–	1.20
101	100	N	100KHz, 0.1V	520.0	700	304	253	0.40	0.84	1.35	1.09
121	120	N	100KHz, 0.1V	–	765	–	303	–	0.76	–	1.00
151	150	N	100KHz, 0.1V	–	876	506	370	–	0.70	1.15	0.91
181	180	N	100KHz, 0.1V	–	–	631	419	–	–	1.03	0.84
221	220	N	100KHz, 0.1V	–	–	756	500	–	–	0.92	0.75
271	270	N	100KHz, 0.1V	–	–	–	672	–	–	–	0.68
331	330	N	100KHz, 0.1V	–	–	1090	812	–	–	0.70	0.60
391	390	N	100KHz, 0.1V	–	–	–	953	–	–	–	0.57
471	470	N	100KHz, 0.1V	–	–	–	1289	–	–	–	0.50
561	560	N	100KHz, 0.1V	–	–	–	1430	–	–	–	0.47
681	680	N	100KHz, 0.1V	–	–	–	1599	–	–	–	0.43
821	820	N	100KHz, 0.1V	–	–	–	1768	–	–	–	0.39
102	1000	N	100KHz, 0.1V	–	–	–	1989	–	–	–	0.35

# LMax SMD Power Inductor



## LMXS Series – Shielded Style L

### FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

### APPLICATIONS

- LCD Televisions
- Notebooks
- Camcorders
- Digital Cameras
- DC/DC Converters for Portable Devices

### CHARACTERISTICS

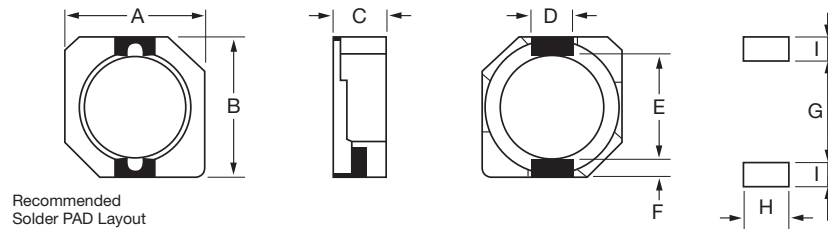
- Rated Current (IDC): The DC current that will cause an approximate  $\Delta T$  of 40°C. (Ta=25°C)
- Operating temperature range: -40°C ~ +125°C

### INDUCTANCE AND RATED CURRENT RANGES

- 1010 0.8uH ~ 47.0uH 11.2 ~ 1.43A
- 101D 1.5uH ~ 330uH 10.0 ~ 0.70A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A max	B max	C max	D	E	F	G	H	I
1010	10.3 (0.398)	10.5 (0.414)	3.10 (0.122)	3.00 ± 0.10 (0.119 ± 0.004)	7.70 ± 0.30 (0.303 ± 0.012)	1.20 ± 0.150 (0.048 ± 0.006)	7.30 (0.288)	3.20 (0.126)	1.60 (0.630)
101D	10.3 (0.398)	10.5 (0.414)	3.80 ± 0.20 (0.150 ± 0.008)	3.00 ± 0.1 (0.119 ± 0.004)	7.70 ± 0.30 (0.303 ± 0.012)	1.2 ± 0.15 (0.048 ± 0.006)	7.30 (0.288)	3.20 (0.126)	1.60 (0.630)

### HOW TO ORDER

<b>LM</b>	<b>XS</b>	<b>1010</b>	<b>N</b>	<b>2R2</b>	<b>L</b>	<b>T</b>	<b>A</b>	<b>S</b>
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	XS = Shielded	1010 = 10x10xh 101D = 10x10xD(h) (h = see catalog)	N = ±30%	0R8 = 0.8µH 470 = 47.00µH 331 = 330.0µH		T = Sn Plate	A = Standard	S = 13" Reel

# LMax SMD Power Inductor



## LMXS Series – Shielded Style L

### ELECTRICAL CHARACTERISTICS

#### 1010

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
0R8	0.8	N	100KHz, 1.0V	0.0057	11.2
1R5	1.5	N	100KHz, 1.0V	0.011	8.00
2R2	2.2	N	100KHz, 1.0V	0.0159	6.70
3R3	3.3	N	100KHz, 1.0V	0.021	5.56
4R7	4.7	N	100KHz, 1.0V	0.030	4.55
6R8	6.8	N	100KHz, 1.0V	0.035	3.84
8R0	8.0	N	100KHz, 1.0V	0.050	3.54
100	10	N	100KHz, 1.0V	0.059	3.18
150	15	N	100KHz, 1.0V	0.091	2.60
220	22	N	100KHz, 1.0V	0.143	2.16
330	33	N	100KHz, 1.0V	0.202	1.74
470	47	N	100KHz, 1.0V	0.299	1.43

#### 101D

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
1R5	1.5	N	100KHz, 1.0V	0.0081	10.0
2R5	2.5	N	100KHz, 1.0V	0.010	7.50
3R8	3.8	N	100KHz, 1.0V	0.013	6.00
4R7	4.7	N	100KHz, 1.0V	0.022	5.50
5R2	5.2	N	100KHz, 1.0V	0.022	5.50
7R0	7.0	N	100KHz, 1.0V	0.027	4.80
100	10	N	100KHz, 1.0V	0.035	4.40
150	15	N	100KHz, 1.0V	0.050	3.60
220	22	N	100KHz, 1.0V	0.073	2.90
330	33	N	100KHz, 1.0V	0.093	2.30
470	47	N	100KHz, 1.0V	0.128	2.10
680	68	N	100KHz, 1.0V	0.213	1.50
101	100	N	100KHz, 1.0V	0.304	1.35
151	150	N	100KHz, 1.0V	0.506	1.15
221	220	N	100KHz, 1.0V	0.756	0.92
331	330	N	100KHz, 1.0V	1.090	0.70

# LMax SMD Power Inductor



## LMXS Series – Shielded Style M

### FEATURES

- Magnetically shielded construction
- RoHS compliance

### APPLICATIONS

- LCD TV
- DC to DC Converters
- Notebook PC

### CHARACTERISTICS

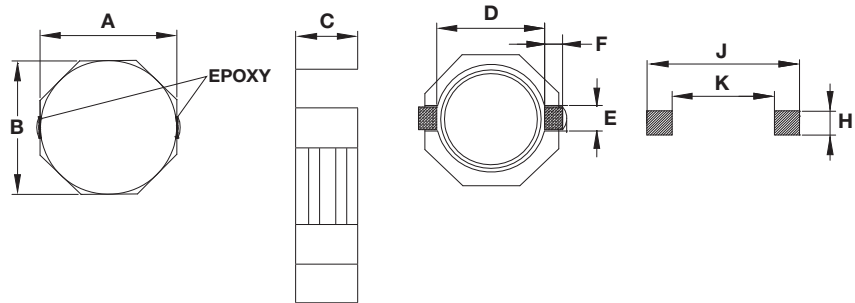
- Rated DC Current: The current when the inductance becomes 35% lower than its initial value.
- Operating temperature: -40 ~ 85°C

### INDUCTANCE AND RATED CURRENT RANGES

- 0808 1.0 ~ 100µH 6.5 ~ 0.75A
- 08D8 1.8 ~ 100µH 7.0 ~ 1.05A
- 08E8 1.0 ~ 100µH 9.0 ~ 1.30A
- Electrical specifications at 25°C



### DIMENSIONS



mm (inches)

Type	A	B	C max.	D Ref.	E Ref.	F Ref.	H	J	K
0808	8.00 ± 0.30 (0.315 ± 0.012)	8.00 ± 0.30 (0.315 ± 0.012)	3.00 (0.118)	6.30 (0.248)	2.50 (0.098)	1.20 (0.047)	2.80 (0.110)	10.1 (0.398)	6.10 (0.240)
08D8	8.00 ± 0.30 (0.315 ± 0.012)	8.00 ± 0.30 (0.315 ± 0.012)	4.00 (0.157)	6.30 (0.248)	2.50 (0.098)	1.20 (0.047)	2.80 (0.110)	10.1 (0.398)	6.10 (0.240)
08E8	8.0 ± 0.30 (0.315 ± 0.012)	8.00 ± 0.30 (0.315 ± 0.012)	4.50 (0.177)	6.30 (0.248)	2.50 (0.098)	1.20 (0.047)	2.80 (0.110)	10.1 (0.398)	6.10 (0.240)

### HOW TO ORDER

**LM**



**Family**

LM = Power Inductor

**XS**



**Series**

XN = Non-shielded

**0808**



**Size**

0808 = 8x8xh  
08D8 = 8x8xD(h)  
(h = see catalog)

**N**



**Tolerance**

N = ±30%

**R04**



**Inductance**

3R9 = 3.900µH  
390 = 39.00µH  
391 = 390.0µH  
392 = 3900µH

**M**



**Style**

**T**



**Termination**

T = Sn Plate

**A**



**Special**

A = Standard

**S**



**Packaging**

S = 13" Reel

# LMax SMD Power Inductor



## LMXS Series – Shielded Style M

### ELECTRICAL CHARACTERISTICS

#### 0808/08D8/08E8

Codes	L ( $\mu$ H)	Tolerance	Test Condition		DCR ( $\Omega$ ) max.			I sat (A) max*		
			0808	08D8/08E8	0808	08D8	08E8	0808	08D8	0838
1R0	1.0	N	100KHz, 0.25V	100KHz, 0.1V	11.0	–	9.50	6.5	–	9.0
1R2	1.2	N	100KHz, 0.25V	100KHz, 0.1V	–	–	12.2	–	–	8.0
1R8	1.8	N	100KHz, 0.25V	100KHz, 0.1V	–	15.6	–	–	7.0	–
2R0	2.0	N	100KHz, 0.25V	100KHz, 0.1V	–	–	14.0	–	–	7.0
2R5	2.5	N	100KHz, 0.25V	100KHz, 0.1V	15.6	17.5	–	4.5	6.5	–
3R3	3.3	N	100KHz, 0.25V	100KHz, 0.1V	18.2	–	–	4.0	–	–
3R5	3.5	N	100KHz, 0.25V	100KHz, 0.1V	–	24.0	–	–	5.0	–
3R9	3.9	N	100KHz, 0.25V	100KHz, 0.1V	–	–	19.0	–	–	5.9
4R7	4.7	N	100KHz, 0.25V	100KHz, 0.1V	24.7	29.0	22.0	3.4	4.6	5.6
6R0	6.0	N	100KHz, 0.25V	100KHz, 0.1V	–	32.0	–	–	4.2	–
6R8	6.8	N	100KHz, 0.25V	100KHz, 0.1V	–	–	25.0	–	–	4.4
7R3	7.3	N	100KHz, 0.25V	100KHz, 0.1V	39.0	–	–	2.80	–	–
100	10	N	100KHz, 0.25V	100KHz, 0.1V	47.0	48.0	36.0	2.50	3.00	4.0
150	15	N	100KHz, 0.25V	100KHz, 0.1V	69.0	67.0	53.0	1.90	2.75	2.9
220	22	N	100KHz, 0.25V	100KHz, 0.1V	99.0	105	75.0	1.60	2.30	2.6
330	33	N	100KHz, 0.25V	100KHz, 0.1V	156	157	125	1.30	1.75	2.2
470	47	N	100KHz, 0.25V	100KHz, 0.1V	195	189	150	1.15	1.52	1.8
680	68	N	100KHz, 0.25V	100KHz, 0.1V	286	290	240	0.92	1.30	1.5
101	100	N	100KHz, 0.25V	100KHz, 0.1V	430	410	360	0.75	1.05	1.3

\*Saturation Current: The current when the inductance becomes 35% lower than its initial value.

# LMax SMD Power Inductor



## LMXS Series – Shielded Style P

### FEATURES

- Magnetically Shielded Construction
- Large Current
- Low DCR

### APPLICATIONS

- LCD Televisions
- Notebooks
- Camcorders
- Digital Cameras
- DC/DC Converters for Portable Devices

### CHARACTERISTICS

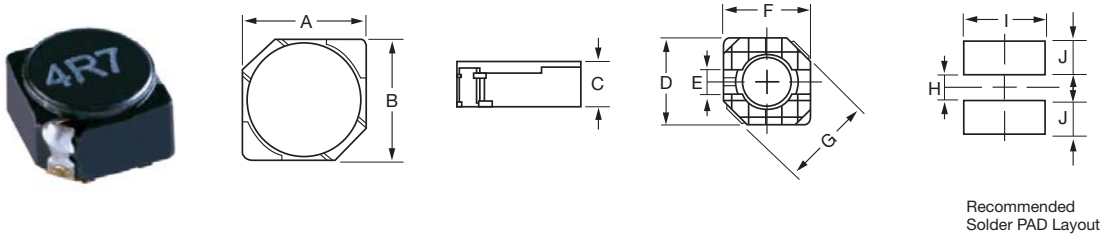
- Rated Current (IDC): The DC current that will cause an approximate  $\Delta T$  of 40°C. ( $T_a=25^\circ\text{C}$ )
- Operating temperature range:  $-40^\circ\text{C} \sim +125^\circ\text{C}$

### INDUCTANCE AND RATED CURRENT RANGES

- 0404 1.5 ~ 33 $\mu\text{H}$  1.55 ~ 0.32A
- 0505 1.0 ~ 39 $\mu\text{H}$  1.72 ~ 0.30A
- 05C5 1.2 ~ 180 $\mu\text{H}$  2.56 ~ 0.22A
- 0606 4.1 ~ 100 $\mu\text{H}$  1.95 ~ 0.36A
- 06C6 2.6 ~ 100 $\mu\text{H}$  2.6 ~ 0.42A
- 0707 3.3 ~ 10 $\mu\text{H}$  3.00 ~ 1.8A
- 07C7 3.0 ~ 100 $\mu\text{H}$  3.00 ~ 0.54A
- 07D7 3.3 ~ 100 $\mu\text{H}$  3.50 ~ 0.65A
- Electrical specifications at 25°C



### DIMENSIONS



Type	A	B max	C max	D	E	F max	G max	H	I
0404	3.80 ± 0.50 (0.150 ± 0.012)	3.80 ± 0.50 (0.150 ± 0.012)	1.80 ± 0.20 (0.071 ± .008)	3.80 (0.150)	1.10 (0.044)	3.80 (0.150)	5.00 (0.196)	1.10 (0.044)	4.60 (0.181)
0505	4.70 ± 0.50 (0.185 ± 0.012)	4.70 ± 0.50 (0.185 ± 0.012)	2.00 (0.079)	4.50 (0.177)	1.50 (0.059)	4.50 (0.177)	6.90 (0.272)	1.50 (0.059)	5.30 (0.209)
05C5	4.70 ± 0.50 (0.185 ± 0.012)	4.70 ± 0.50 (0.185 ± 0.012)	3.00 (0.119)	4.50 (0.177)	1.50 (0.059)	4.50 (0.177)	6.90 (0.272)	1.50 (0.059)	5.30 (0.209)
0606	5.7 ± 0.50 (0.225 ± 0.012)	5.70 ± 0.50 (0.225 ± 0.012)	2.10 (0.083)	5.50 (0.217)	2.00 (0.079)	5.50 (0.217)	8.20 (0.323)	2.00 (0.079)	6.30 (0.248)
06C6	5.70 ± 0.50 (0.225 ± 0.012)	5.70 ± 0.50 (0.225 ± 0.012)	3.00 (0.119)	5.50 (0.217)	2.00 (0.079)	5.50 (0.217)	8.20 (0.323)	2.00 (0.079)	6.30 (0.248)
0707	6.70 ± 0.40 (0.264 ± 0.158)	6.70 ± 0.40 (0.264 ± 0.158)	1.90 (0.075)	6.50 (0.256)	2.00 (0.079)	6.50 (0.256)	9.50 (0.375)	2.00 (0.079)	7.30 (0.288)
07C7	6.70 ± 0.50 (0.264 ± 0.012)	6.70 ± 0.50 (0.264 ± 0.012)	3.00 (0.119)	6.50 (0.256)	2.00 (0.079)	6.50 (0.256)	9.50 (0.375)	2.00 (0.079)	7.30 (0.288)
07D7	6.70 ± 0.50 (0.264 ± 0.012)	6.70 ± 0.50 (0.264 ± 0.012)	4.00 (0.158)	6.50 (0.256)	2.00 (0.079)	6.50 (0.256)	9.50 (0.375)	2.00 (0.079)	7.30 (0.288)

mm (inches)

### HOW TO ORDER

<b>LM</b>	<b>XS</b>	<b>0505</b>	<b>M</b>	<b>2R2</b>	<b>P</b>	<b>T</b>	<b>A</b>	<b>S</b>
Family	Series	Size	Tolerance	Inductance	Style	Termination	Special	Packaging
LM = Power Inductor	XS = Shielded	0505 = 5x5xh 05C5 = 5x5xC(h) (h = see catalog)	M = ±20%	0R8 = 0.8 $\mu\text{H}$ 470 = 47.00 $\mu\text{H}$ 331 = 330.0 $\mu\text{H}$		T = Sn Plate	A = Standard	S = 13" Reel





# LMax SMD Power Inductor



## LMXS Series – Shielded Style P

### ELECTRICAL CHARACTERISTICS

#### 0404

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
1R5	1.5	M	100KHz, 1.0V	0.052	1.55
2R2	2.2	M	100KHz, 1.0V	0.072	1.20
3R3	3.3	M	100KHz, 1.0V	0.085	1.10
4R7	4.7	M	100KHz, 1.0V	0.105	0.90
6R8	6.8	M	100KHz, 1.0V	0.170	0.73
100	10	M	100KHz, 1.0V	0.210	0.55
150	15	M	100KHz, 1.0V	0.295	0.45
220	22	M	100KHz, 1.0V	0.430	0.40
330	33	M	100KHz, 1.0V	0.675	0.32

#### 0505

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
1R0	1.0	M	100KHz, 1.0V	0.045	1.72
2R2	2.2	M	100KHz, 1.0V	0.060	1.32
2R7	2.7	M	100KHz, 1.0V	0.070	1.28
3R3	3.3	M	100KHz, 1.0V	0.085	1.04
3R9	3.9	M	100KHz, 1.0V	0.110	0.88
4R7	4.7	M	100KHz, 1.0V	0.128	0.84
5R6	5.6	M	100KHz, 1.0V	0.145	0.80
6R8	6.8	M	100KHz, 1.0V	0.158	0.76
8R2	8.2	M	100KHz, 1.0V	0.185	0.68
100	10	M	100KHz, 1.0V	0.200	0.61
120	12	M	100KHz, 1.0V	0.210	0.56
150	15	M	100KHz, 1.0V	0.240	0.50
180	18	M	100KHz, 1.0V	0.338	0.48
220	22	M	100KHz, 1.0V	0.397	0.41
270	27	M	100KHz, 1.0V	0.441	0.35
330	33	M	100KHz, 1.0V	0.694	0.32
390	39	M	100KHz, 1.0V	0.709	0.30

#### 05C5

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
1R2	1.2	M	100KHz, 1.0V	0.0236	2.56
1R8	1.8	M	100KHz, 1.0V	0.0275	2.20
2R2	2.2	M	100KHz, 1.0V	0.0313	2.04
2R7	2.7	M	100KHz, 1.0V	0.0433	1.60
3R3	3.3	M	100KHz, 1.0V	0.0492	1.57
3R9	3.9	M	100KHz, 1.0V	0.0648	1.44
4R7	4.7	M	100KHz, 1.0V	0.0720	1.32
5R6	5.6	M	100KHz, 1.0V	0.1009	1.17
6R8	6.8	M	100KHz, 1.0V	0.1089	1.12
8R2	8.2	M	100KHz, 1.0V	0.1175	1.04
100	10	M	100KHz, 1.0V	0.1283	1.00
120	12	M	100KHz, 1.0V	0.1316	0.84
150	15	M	100KHz, 1.0V	0.1490	0.76
180	18	M	100KHz, 1.0V	0.1660	0.72
220	22	M	100KHz, 1.0V	0.2350	0.70
270	27	M	100KHz, 1.0V	0.2610	0.58
330	33	M	100KHz, 1.0V	0.3780	0.56
390	39	M	100KHz, 1.0V	0.3837	0.50
470	47	M	100KHz, 1.0V	0.5870	0.48
560	56	M	100KHz, 1.0V	0.6245	0.41
680	68	M	100KHz, 1.0V	0.6990	0.35
820	82	M	100KHz, 1.0V	0.9148	0.32
101	100	M	100KHz, 1.0V	1.020	0.29
121	120	M	100KHz, 1.0V	1.270	0.27
151	150	M	100KHz, 1.0V	1.350	0.24
181	180	M	100KHz, 1.0V	1.540	0.22

# LMax SMD Power Inductor



## LMXS Series – Shielded Style P

### 0606

Codes	L (µH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
4R1	4.1	M	100KHz, 1.0V	0.057	1.95
5R4	5.4	M	100KHz, 1.0V	0.076	1.6
6R2	6.2	M	100KHz, 1.0V	0.096	1.4
8R9	8.9	M	100KHz, 1.0V	0.116	1.25
100	10	M	100KHz, 1.0V	0.124	1.2
120	12	M	100KHz, 1.0V	0.153	1.1
150	15	M	100KHz, 1.0V	0.196	0.97
180	18	M	100KHz, 1.0V	0.21	0.85
220	22	M	100KHz, 1.0V	0.29	0.8
270	27	M	100KHz, 1.0V	0.33	0.75
330	33	M	100KHz, 1.0V	0.386	0.65
390	39	M	100KHz, 1.0V	0.52	0.57
470	47	M	100KHz, 1.0V	0.595	0.54
560	56	M	100KHz, 1.0V	0.665	0.5
680	68	M	100KHz, 1.0V	0.84	0.43
820	82	M	100KHz, 1.0V	0.978	0.41
101	100	M	100KHz, 1.0V	1.2	0.36

### 06C6

Codes	L (µH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
2R6	2.6	M	100KHz, 1.0V	0.018	2.6
3R0	3	M	100KHz, 1.0V	0.024	2.4
4R2	4.2	M	100KHz, 1.0V	0.031	2.2
5R3	5.3	M	100KHz, 1.0V	0.038	1.9
6R2	6.2	M	100KHz, 1.0V	0.045	1.8
8R2	8.2	M	100KHz, 1.0V	0.053	1.6
100	10	M	100KHz, 1.0V	0.065	1.3
120	12	M	100KHz, 1.0V	0.076	1.2
150	15	M	100KHz, 1.0V	0.103	1.1
180	18	M	100KHz, 1.0V	0.11	1
220	22	M	100KHz, 1.0V	0.122	0.9
270	27	M	100KHz, 1.0V	0.175	0.85
330	33	M	100KHz, 1.0V	0.189	0.75
390	39	M	100KHz, 1.0V	0.212	0.7
470	47	M	100KHz, 1.0V	0.26	0.62
560	56	M	100KHz, 1.0V	0.305	0.58
680	68	M	100KHz, 1.0V	0.355	0.52
820	82	M	100KHz, 1.0V	0.463	0.46
101	100	M	100KHz, 1.0V	0.52	0.42

# LMax SMD Power Inductor



## LMXS Series – Shielded Style P

### 0707

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
3R3	3.3	M	100KHz, 1.0V	0.069	3
4R7	4.7	M	100KHz, 1.0V	0.075	2.4
6R8	6.8	M	100KHz, 1.0V	0.106	2.2
100	10	M	100KHz, 1.0V	0.15	1.8

### 07C7

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
3R0	3	M	100KHz, 1.0V	0.024	3
3R9	3.9	M	100KHz, 1.0V	0.027	2.6
5R0	5	M	100KHz, 1.0V	0.031	2.4
6R0	6	M	100KHz, 1.0V	0.035	2.25
7R3	7.3	M	100KHz, 1.0V	0.054	2.1
8R6	8.6	M	100KHz, 1.0V	0.058	1.85
100	10	M	100KHz, 1.0V	0.065	1.7
120	12	M	100KHz, 1.0V	0.07	1.55
150	15	M	100KHz, 1.0V	0.084	1.4
180	18	M	100KHz, 1.0V	0.095	1.32
220	22	M	100KHz, 1.0V	0.128	1.2
270	27	M	100KHz, 1.0V	0.142	1.05
330	33	M	100KHz, 1.0V	0.165	0.97
390	39	M	100KHz, 1.0V	0.21	0.86
470	47	M	100KHz, 1.0V	0.238	0.8
560	56	M	100KHz, 1.0V	0.277	0.73
680	68	M	100KHz, 1.0V	0.304	0.65
820	82	M	100KHz, 1.0V	0.39	0.6
101	100	M	100KHz, 1.0V	0.535	0.54

### 07D7

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.
3R3	3.3	M	100KHz, 1.0V	0.02	3.5
5R0	5	M	100KHz, 1.0V	0.024	2.9
6R0	6	M	100KHz, 1.0V	0.027	2.5
7R3	7.3	M	100KHz, 1.0V	0.031	2.3
8R6	8.6	M	100KHz, 1.0V	0.034	2.2
100	10	M	100KHz, 1.0V	0.038	2
120	12	M	100KHz, 1.0V	0.053	1.7
150	15	M	100KHz, 1.0V	0.057	1.6
180	18	M	100KHz, 1.0V	0.092	1.5
220	22	M	100KHz, 1.0V	0.096	1.3
270	27	M	100KHz, 1.0V	0.109	1.2
330	33	M	100KHz, 1.0V	0.124	1.1
390	39	M	100KHz, 1.0V	0.138	1
470	47	M	100KHz, 1.0V	0.155	0.95
560	56	M	100KHz, 1.0V	0.202	0.85
680	68	M	100KHz, 1.0V	0.234	0.75
820	82	M	100KHz, 1.0V	0.324	0.7
101	100	M	100KHz, 1.0V	0.358	0.65

# LMax SMD Power Inductor



## LMMN Series – Miniature Style M

### FEATURES

- The miniature chip inductors is wound on a special ferrite core.
- 0302/ 03A2/ 0403 are high Q value at high frequency and low DC resistance.
- 03A2/ 0403/ 0605 are low DC resistance, high current capacity, and high impedance characteristics. They are excellent for using as a choke coil in DC power supply circuits.

### APPLICATIONS

- Pagers, Cordless Phone
- High Frequency Communication Products
- Personal Computers
- Disk Drives And Computer Peripherals
- DC Power Supply Circuits

### CHARACTERISTICS

Except 0202/02A2/02B2/0302

- Rated DC Current: The current when the inductance becomes 10% lower than its initial value or the current when the temperature of coil increases A T20°C. The smaller one is defined as Rated DC Current. (Ta=25°C)
- Operating temperature range: -40 ~ 85°C

### CHARACTERISTICS FOR 0202/02A2/02B2/0302

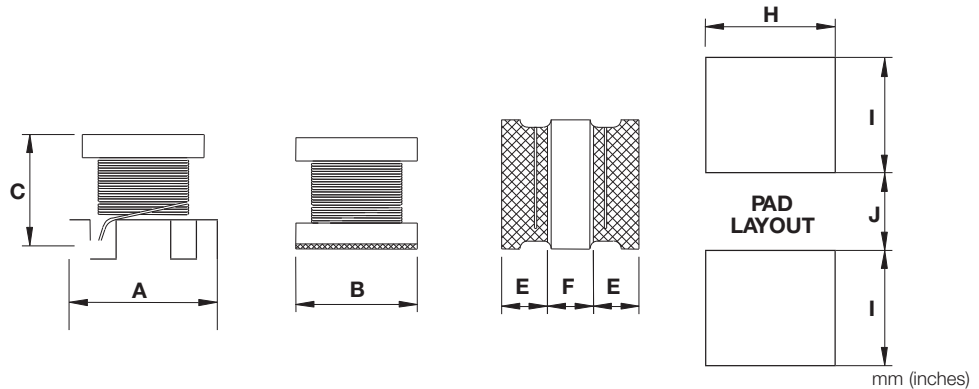
- Rated DC Current (Isat): The current when the inductance becomes 30% typical its initial value (Ta=25°C)
- Temperature Rise Current (I rms): The actual current when the temperature of coil becomes A T=40°C (Ta=25°C)
- Operating temperature range: -40 ~ 105°C

### INDUCTANCE AND RATED CURRENT RANGES

- |            |                |               |
|------------|----------------|---------------|
| • 0202     | 1.00 ~ 10μH    | 2.80 ~ 0.65A  |
| • 02A2     | 1.00 ~ 10μH    | 3.70 ~ 0.90A  |
| • 02B2     | 1.00 ~ 22μH    | 2.30 ~ 0.51A  |
| • 0302     | 1.00 ~ 100μH   | 1.00 ~ 0.1A   |
| • 03A2     | 1.00 ~ 560μH   | 0.445 ~ 0.04A |
| • 0403     | 1.00 ~ 2200μH  | 0.50 ~ 0.03A  |
| • 0302 (C) | 0.47 ~ 120μH   | 3.40 ~ 0.17A  |
| • 03A2 (C) | 1.00 ~ 560μH   | 1.00 ~ 0.06A  |
| • 0403 (C) | 1.00 ~ 470μH   | 1.08 ~ 0.09A  |
| • 0605 (C) | 0.12 ~ 10000μH | 6.00 ~ 0.05A  |
- Electrical specifications at 25°C



### DIMENSIONS



Type	A	B	C	E	F	H	I	J
0202	2.50 ± 0.20 (0.098 ± 0.008)	2.00 ± 0.20 (0.079 ± 0.008)	1.00 max. (0.039)	0.40 ± 0.20 (0.016 ± 0.008)	1.00 min. (0.039)	2.10 (0.083)	0.90 (0.035)	0.80 (0.031)
02A2	2.50 ± 0.20 (0.098 ± 0.008)	2.00 ± 0.20 (0.079 ± 0.008)	1.25 max. (0.049)	0.40 ± 0.20 (0.016 ± 0.008)	1.00 min. (0.039)	2.10 (0.083)	0.90 (0.035)	0.80 (0.031)
02B2	2.50 ± 0.20 (0.098 ± 0.008)	2.50 ± 0.20 (0.098 ± 0.008)	1.05 max. (0.041)	0.85 ref (0.033)	0.85 ref (0.033)	2.50 (0.098)	1.20 (0.047)	0.80 (0.031)
0302 / 0302 (C)	3.20 ± 0.30 (0.126 ± 0.012)	2.50 ± 0.20 (0.098 ± 0.008)	1.55 ± 0.30 (0.061 ± 0.012)	1.05 ± 0.30 (0.041 ± 0.012)	1.05 ± 0.30 (0.041 ± 0.012)	2.00 (0.079)	1.50 (0.059)	1.00 (0.039)
03A2 / 03A2 (C)	3.20 ± 0.30 (0.126 ± 0.012)	2.50 ± 0.20 (0.098 ± 0.008)	2.00 ± 0.30 (0.079 ± 0.012)	1.05 ± 0.30 (0.041 ± 0.012)	1.05 ± 0.30 (0.041 ± 0.012)	2.00 (0.079)	1.50 (0.059)	1.00 (0.039)
0403 / 0403 (C)	4.50 ± 0.30 (0.177 ± 0.012)	3.20 ± 0.20 (0.126 ± 0.008)	2.60 ± 0.30 (0.102 ± 0.012)	1.00 min. (0.039)	1.00 min. (0.039)	3.00 (0.118)	2.00 (0.079)	1.20 (0.047)
0605 (C)	5.70 ± 0.30 (0.224 ± 0.012)	5.00 ± 0.30 (0.197 ± 0.012)	4.70 ± 0.50 (0.185 ± 0.020)	1.30 min. (0.051)	1.70 min. (0.067)	5.00 (0.197)	2.00 (0.079)	2.00 (0.079)

# LMax SMD Power Inductor



## LMMN Series – Miniature Style M

### HOW TO ORDER

<b>LM</b>	<b>MN</b>	<b>0202</b>	<b>N</b>	<b>R04</b>	<b>M</b>	<b>T</b>	<b>A</b>	<b>R</b>
↓	↓	↓	↓	↓	↓	↓	↓	↓
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	XN = Non-shielded	0202 = 2x2xh (h = see catalog)	J = ±5% K = ±10% M = ±20% N = ±30%	R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH		T = Sn Plate	A = Standard C = Choke	R = 7" Reel

### ELECTRICAL CHARACTERISTICS

#### 0202

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I rms (A) Typical	I sat (A) Typical
1R0	1.00	M	1MHz, 0.1V	0.085	1.70	2.00
1R5	1.50	M	1MHz, 0.1V	0.128	1.40	1.70
2R2	2.20	M	1MHz, 0.1V	0.19	1.10	1.40
3R3	3.30	M	1MHz, 0.1V	0.304	0.94	1.20
4R7	4.70	M	1MHz, 0.1V	0.44	0.78	0.98
6R8	6.80	M	1MHz, 0.1V	0.541	0.70	0.82
100	10.0	M	1MHz, 0.1V	0.854	0.52	0.65

#### 02A2

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I rms (A) Typical	I sat (A) Typical
1R0	1.00	M	1MHz, 0.1V	0.088	1.80	2.70
1R5	1.50	M	1MHz, 0.1V	0.126	1.50	2.20
2R2	2.20	M	1MHz, 0.1V	0.155	1.30	2.00
3R3	3.30	M	1MHz, 0.1V	0.272	1.00	1.60
4R7	4.70	M	1MHz, 0.1V	0.45	0.81	1.20
5R6	5.60	M	1MHz, 0.1V	0.45	0.72	1.15
6R8	6.80	M	1MHz, 0.1V	0.612	0.66	1.10
100	10.0	M	1MHz, 0.1V	0.756	0.59	0.90

#### 02B2

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I rms (A) Typical	I sat (A) Typical
1R0	1.00	M	1MHz, 0.1V	0.085	1.90	2.30
1R5	1.50	M	1MHz, 0.1V	0.115	1.50	1.90
2R2	2.20	M	1MHz, 0.1V	0.168	1.20	1.50
3R3	3.30	M	1MHz, 0.1V	0.239	1.10	1.30
4R7	4.70	M	1MHz, 0.1V	0.316	0.90	1.10
5R6	5.60	M	1MHz, 0.1V	0.42	0.83	0.98
6R8	6.80	M	1MHz, 0.1V	0.487	0.80	0.90
8R2	8.20	M	1MHz, 0.1V	0.548	0.71	0.84
100	10.0	M	1MHz, 0.1V	0.61	0.68	0.79
220	22.0	M	1MHz, 0.1V	1.552	0.40	0.51

# LMax SMD Power Inductor



## LMMN Series – Miniature Style M

### 0302

Codes	L (µH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.	SRF (MHz) min.
1R0	1.00	N	1MHz, 0.1V	0.078	1.00	100
1R5	1.50	N	1MHz, 0.1V	0.068	1.20	100
2R2	2.20	M	1MHz, 0.1V	0.126	0.79	64.0
3R3	3.30	M	1MHz, 0.1V	0.18	0.70	50.0
4R7	4.70	M	1MHz, 0.1V	0.195	0.65	43.0
100	10.0	K	1MHz, 0.1V	0.42	0.45	26.0
150	15.0	K	1MHz, 0.1V	0.75	0.30	22.0
220	22.0	K	1MHz, 0.1V	1.00	0.25	19.0
330	33.0	K	1MHz, 0.1V	1.40	0.20	17.0
470	47.0	K	1MHz, 0.1V	2.20	0.17	13.0
680	68.0	K	1MHz, 0.1V	3.20	0.13	9.00
101	100	K	1MHz, 0.1V	4.50	0.10	8.00

### 03A2

Codes	L (µH)	Tolerance	Test Condition	Quality Factor		DCR (Ω) max.	IDC (A) max.	SRF (MHz) min.
				Spec. min.	Test Condition			
1R0	1.00	M	1MHz, 0.1V	20	1MHz, 0.1V	0.50	0.445	100
1R2	1.20	M	1MHz, 0.1V	20	1MHz, 0.1V	0.60	0.425	100
1R5	1.50	K, M	1MHz, 0.1V	20	1MHz, 0.1V	0.60	0.40	75.0
1R8	1.80	K, M	1MHz, 0.1V	20	1MHz, 0.1V	0.70	0.39	60.0
2R2	2.20	K, M	1MHz, 0.1V	20	1MHz, 0.1V	0.80	0.37	50.0
2R7	2.70	K, M	1MHz, 0.1V	20	1MHz, 0.1V	0.90	0.32	43.0
3R3	3.30	K, M	1MHz, 0.1V	20	1MHz, 0.1V	1.00	0.30	38.0
3R9	3.90	K, M	1MHz, 0.1V	20	1MHz, 0.1V	1.10	0.29	35.0
4R7	4.70	K, M	1MHz, 0.1V	20	1MHz, 0.1V	1.20	0.27	31.0
5R6	5.60	K, M	1MHz, 0.1V	20	1MHz, 0.1V	1.30	0.25	28.0
6R8	6.80	K, M	1MHz, 0.1V	20	1MHz, 0.1V	1.50	0.24	25.0
8R2	8.20	K, M	1MHz, 0.1V	20	1MHz, 0.1V	1.60	0.225	23.0
100	10.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	1.80	0.19	20.0
120	12.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	2.00	0.18	18.0
150	15.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	2.20	0.17	16.0
180	18.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	2.50	0.165	15.0
220	22.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	2.80	0.15	14.0
270	27.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	3.10	0.125	13.0
330	33.0	J, K	1MHz, 0.1V	40	1MHz, 0.1V	3.50	0.115	12.0
390	39.0	J, K	1MHz, 0.1V	40	1MHz, 0.1V	3.90	0.11	11.0
470	47.0	J, K	1MHz, 0.1V	40	1MHz, 0.1V	4.30	0.10	11.0
560	56.0	J, K	1MHz, 0.1V	40	1MHz, 0.1V	4.90	0.085	10.0
680	68.0	J, K	1MHz, 0.1V	40	1MHz, 0.1V	5.50	0.08	9.00
820	82.0	J, K	1MHz, 0.1V	40	1MHz, 0.1V	6.20	0.07	8.50
101	100	J, K	1MHz, 0.1V	40	796KHz, 0.1V	7.00	0.08	8.00
121	120	J, K	1MHz, 0.1V	40	796KHz, 0.1V	8.00	0.075	7.50
151	150	J, K	1MHz, 0.1V	40	796KHz, 0.1V	9.30	0.07	7.00
181	180	J, K	1MHz, 0.1V	40	796KHz, 0.1V	10.20	0.065	6.00
221	220	J, K	1MHz, 0.1V	40	796KHz, 0.1V	11.80	0.065	5.50
271	270	J, K	1MHz, 0.1V	40	796KHz, 0.1V	12.50	0.065	5.00
331	330	J, K	1MHz, 0.1V	40	796KHz, 0.1V	15.00	0.065	5.00
391	390	J, K	1MHz, 0.1V	50	796KHz, 0.1V	22.00	0.05	5.00
471	470	J, K	1KHz, 0.1V	50	796KHz, 0.1V	25.00	0.045	5.00
561	560	J, K	1KHz, 0.1V	50	796KHz, 0.1V	28.00	0.04	5.00 ref

# LMax SMD Power Inductor



## LMMN Series – Miniature Style M

0403

Codes	L ( $\mu$ H)	Tolerance	Test Condition	Quality Factor		DCR ( $\Omega$ ) max.	IDC (A) max.	SRF (MHz) min.
				Spec. min.	Test Condition			
1R0	1.00	M	1MHz, 0.1V	20	1MHz, 0.1V	0.20	0.50	120
1R2	1.20	M	1MHz, 0.1V	20	1MHz, 0.1V	0.20	0.50	100
1R5	1.50	M	1MHz, 0.1V	20	1MHz, 0.1V	0.30	0.50	85.0
1R8	1.80	M	1MHz, 0.1V	20	1MHz, 0.1V	0.30	0.50	75.0
2R2	2.20	M	1MHz, 0.1V	20	1MHz, 0.1V	0.30	0.50	62.0
2R7	2.70	M	1MHz, 0.1V	20	1MHz, 0.1V	0.32	0.50	53.0
3R3	3.30	M	1MHz, 0.1V	20	1MHz, 0.1V	0.35	0.50	47.0
3R9	3.90	M	1MHz, 0.1V	20	1MHz, 0.1V	0.38	0.50	41.0
4R7	4.70	K, M	1MHz, 0.1V	30	1MHz, 0.1V	0.40	0.50	38.0
5R6	5.60	K, M	1MHz, 0.1V	30	1MHz, 0.1V	0.47	0.50	33.0
6R8	6.80	K, M	1MHz, 0.1V	30	1MHz, 0.1V	0.50	0.45	31.0
8R2	8.20	K, M	1MHz, 0.1V	30	1MHz, 0.1V	0.56	0.45	27.0
100	10.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	0.56	0.40	23.0
120	12.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	0.62	0.38	21.0
150	15.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	0.73	0.36	19.0
180	18.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	0.82	0.34	17.0
220	22.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	0.94	0.32	15.0
270	27.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	1.10	0.30	14.0
330	33.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	1.20	0.27	12.0
390	39.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	1.40	0.24	11.0
470	47.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	1.50	0.22	10.0
560	56.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	1.70	0.20	9.30
680	68.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	1.90	0.18	8.40
820	82.0	J, K	1MHz, 0.1V	35	1MHz, 0.1V	2.20	0.17	7.50
101	100	J, K	1MHz, 0.1V	40	796KHz, 0.1V	2.50	0.16	6.80
121	120	J, K	1MHz, 0.1V	40	796KHz, 0.1V	3.00	0.15	6.20
151	150	J, K	1MHz, 0.1V	40	796KHz, 0.1V	3.70	0.13	5.50
181	180	J, K	1MHz, 0.1V	40	796KHz, 0.1V	4.50	0.12	5.00
221	220	J, K	1MHz, 0.1V	40	796KHz, 0.1V	5.40	0.11	4.50
271	270	J, K	1MHz, 0.1V	40	796KHz, 0.1V	6.80	0.10	4.00
331	330	J, K	1MHz, 0.1V	40	796KHz, 0.1V	8.20	0.095	3.60
391	390	J, K	1MHz, 0.1V	40	796KHz, 0.1V	9.70	0.09	3.30
471	470	J, K	1KHz, 0.1V	40	796KHz, 0.1V	11.80	0.08	3.00
561	560	J, K	1KHz, 0.1V	40	796KHz, 0.1V	14.50	0.07	2.70
681	680	J, K	1KHz, 0.1V	40	796KHz, 0.1V	17.00	0.065	2.50
821	820	J, K	1KHz, 0.1V	40	796KHz, 0.1V	20.50	0.06	2.20
102	1000	J, K	1KHz, 0.1V	40	252KHz, 0.1V	25.00	0.05	2.00
122	1200	J, K	1KHz, 0.1V	40	252KHz, 0.1V	30.00	0.045	1.80
152	1500	J, K	1KHz, 0.1V	40	252KHz, 0.1V	37.00	0.04	1.60
182	1800	J, K	1KHz, 0.1V	40	252KHz, 0.1V	45.00	0.035	1.50
222	2200	J, K	1KHz, 0.1V	40	252KHz, 0.1V	50.00	0.03	1.30

# LMax SMD Power Inductor



## LMMN Series – Miniature Style M

### 0302 (C)

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) ±20%	I sat (A) max.	I rms (A) max.	SRF (MHz) min.
R47	0.47	N	1MHz, 0.1V	0.03	3.40	2.55	100
1R0	1.00	N	1MHz, 0.1V	0.045	2.30	2.05	100
1R5	1.50	N	1MHz, 0.1V	0.057	1.75	1.75	70.0
2R2	2.20	N	1MHz, 0.1V	0.076	1.55	1.60	70.0
3R3	3.30	N	1MHz, 0.1V	0.12	1.25	1.20	50.0
4R7	4.70	N	1MHz, 0.1V	0.18	1.00	1.00	40.0
6R8	6.80	N	1MHz, 0.1V	0.24	0.85	0.85	40.0
100	10.0	M	1MHz, 0.1V	0.38	0.75	0.70	30.0
150	15.0	M	1MHz, 0.1V	0.57	0.60	0.52	20.0
220	22.0	M	1MHz, 0.1V	0.81	0.50	0.45	20.0
330	33.0	M	1MHz, 0.1V	1.15	0.38	0.39	13.0
470	47.0	M	1MHz, 0.1V	1.78	0.33	0.31	11.0
680	68.0	M	1MHz, 0.1V	2.28	0.28	0.275	11.0
101	100	M	1MHz, 0.1V	2.70	0.18	0.25	8.00
121	120	M	1MHz, 0.1V	4.38	0.17	0.20	8.00

### 03A2 (C)

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.	SRF (MHz) min.
1R0	1.00	M	1MHz, 0.1V	0.078	1.00	100
2R2	2.20	M	1MHz, 0.1V	0.126	0.79	64.0
3R3	3.30	M	1MHz, 0.1V	0.165	0.50	50.0
4R7	4.70	M	1MHz, 0.1V	0.195	0.45	43.0
6R8	6.80	M	1MHz, 0.1V	0.33	0.45	38.0
100	10.0	M	1MHz, 0.1V	0.572	0.30	26.0
220	22.0	K, M	1MHz, 0.1V	0.923	0.25	19.0
470	47.0	K, M	1MHz, 0.1V	1.69	0.17	12.0
101	100	J, K	1MHz, 0.1V	4.55	0.10	8.00
151	150	J, K	1MHz, 0.1V	9.10	0.08	7.00
221	220	J, K	1MHz, 0.1V	10.92	0.07	5.50
331	330	J, K	1MHz, 0.1V	13.0	0.06	4.50
391	390	J, K	1MHz, 0.1V	22.1	0.06	4.00
471	470	J, K	1MHz, 0.1V	24.7	0.06	3.70
561	560	J, K	1MHz, 0.1V	28.6	0.06	3.40

### 0403 (C)

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	IDC (A) max.	SRF (MHz) min.
1R0	1.00	M	1MHz, 0.1V	0.08	1.08	100
1R5	1.50	M	1MHz, 0.1V	0.09	1.00	85.0
2R2	2.20	M	1MHz, 0.1V	0.11	0.90	60.0
3R3	3.30	M	1MHz, 0.1V	0.13	0.80	47.0
4R7	4.70	K, M	1MHz, 0.1V	0.15	0.75	35.0
6R8	6.80	K, M	1MHz, 0.1V	0.20	0.72	30.0
100	10.0	J, K	1MHz, 0.1V	0.24	0.65	23.0
150	15.0	J, K	1MHz, 0.1V	0.32	0.57	20.0
220	22.0	J, K	1MHz, 0.1V	0.60	0.42	15.0
330	33.0	J, K	1MHz, 0.1V	1.00	0.31	12.0
470	47.0	J, K	1MHz, 0.1V	1.10	0.28	10.0
680	68.0	J, K	1MHz, 0.1V	1.70	0.22	8.40
101	100	J, K	1MHz, 0.1V	2.20	0.19	6.80
151	150	J, K	1MHz, 0.1V	3.50	0.13	5.50
221	220	J, K	1MHz, 0.1V	4.00	0.11	4.50
331	330	J, K	1MHz, 0.1V	6.80	0.10	3.60
471	470	J, K	1kHz, 0.1V	8.50	0.09	3.00



# LMax SMD Power Inductor



## LMMN Series – Miniature Style M

### 0605 (C)

Codes	L ( $\mu$ H)	Tolerance	Test Condition	DCR ( $\Omega$ ) max.	IDC (A) max.	SRF (MHz) min.
R12	0.12	M	1MHz, 0.1V	0.0098	6.00	450
R27	0.27	M	1MHz, 0.1V	0.014	5.30	300
R47	0.47	M	1MHz, 0.1V	0.0182	4.80	200
1R0	1.00	M	1MHz, 0.1V	0.027	4.00	150
1R5	1.50	M	1MHz, 0.1V	0.031	3.70	110
2R2	2.20	M	1MHz, 0.1V	0.041	3.20	80.0
3R3	3.30	M	1MHz, 0.1V	0.050	2.90	40.0
4R7	4.70	M	1MHz, 0.1V	0.0574	2.70	30.0
6R8	6.80	M	1MHz, 0.1V	0.104	2.00	25.0
100	10.0	K, M	1MHz, 0.1V	0.130	1.70	20.0
150	15.0	K, M	1MHz, 0.1V	0.21	1.40	17.0
220	22.0	K, M	1MHz, 0.1V	0.266	1.20	15.0
330	33.0	K, M	1MHz, 0.1V	0.448	0.90	12.0
470	47.0	K, M	1MHz, 0.1V	0.56	0.80	10.0 ref
680	68.0	K, M	1MHz, 0.1V	0.938	0.64	7.60
101	100	K, M	100KHz, 0.1V	1.204	0.56	6.50
151	150	K, M	100KHz, 0.1V	2.66	0.42	5.00
221	220	K, M	100KHz, 0.1V	3.36	0.32	4.00
331	330	K, M	100KHz, 0.1V	6.16	0.27	3.10
471	470	K, M	100KHz, 0.1V	7.56	0.24	2.40
681	680	K, M	100KHz, 0.1V	11.34	0.19	1.90
102	1000	K, M	10KHz, 0.1V	14.42	0.15	1.70
222	2200	K, M	10KHz, 0.1V	30.1	0.10	1.20
472	4700	K, M	10KHz, 0.1V	61.04	0.07	0.80
103	10000	K, M	10KHz, 0.1V	140.	0.05	0.50

# LMax SMD Power Inductor



## LMMN Series – Miniature Style M

### SHELF STORAGE SPECIFICATIONS

Items	Specifications
Shelf Storage Conditions	Temperature range: 25±3°C • Humidity: <80% relative humidity. Recommendation: Product should be used within six months from the time of delivery.

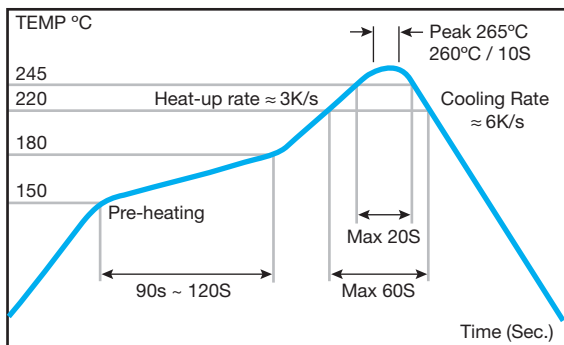
### ENVIRONMENTAL SPECIFICATIONS

Items	Specification	Test Method/Conditions
High Temperature Storage Test	No case deformation or change in appearance $\Delta L/L \leq 10\%$ $\Delta Q/Q \leq 30\%$	Temperature: 85±2°C Time: 48±2 hours Tested after 1 hour at room temperature.
Low Temperature Storage Test		Temperature: -25±2°C Time: 48±2 hours Tested after 1 hour at room temperature.
Humidity Test		Temperature: 40±2°C, 90~95% relative humidity Time: 96±2 hours Tested after 1 hour at room temperature.
Thermal Shock Test		1 Cycle: -25°C for 30 minutes +25°C for 10 minutes 85°C for 30 minutes Go through 5 cycles. Tested after 1 hour at room temperature.

### MECHANICAL SPECIFICATIONS

Items	Specification	Test Method/Conditions
Solderability Test	Terminal area must have 90% minimum solder coverage	Lead-free termination: Dip pads in flux then dip in solder pot at 245±5°C for 3 seconds.
Resistance to solder heat	No case deformation or change in appearance.	Flux should cover the whole of the sample before heating, then be preheated for about 2 minutes over temperature 130 – 150°C. Immersing to 260±5°C for 10 seconds.
Vibration Test	No case deformation or change in appearance $\Delta L/L \leq 10\%$ $\Delta Q/Q \leq 30\%$	Apply frequency at 10 – 55 Hz. 1.5mm amplitude in each of perpendicular direction for 2 hours.
Shock Resistance		Drop down with 981m/s <sup>2</sup> (100G) shock attitude upon a rubber block method shock testing machine – 1 time. In each three orientations.

### RELOW SOLDERING RECOMMENDATION

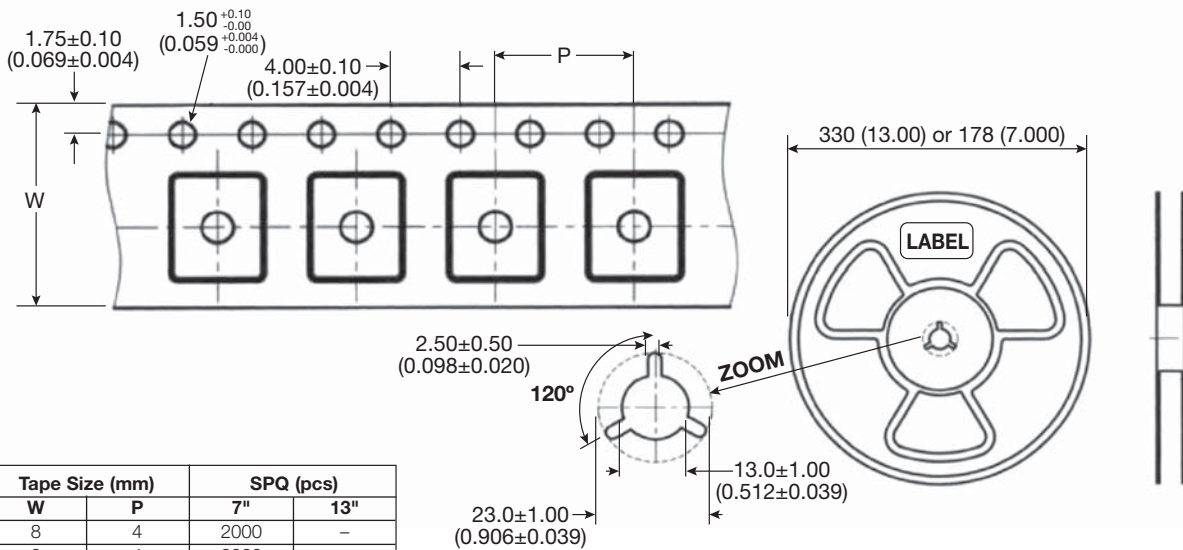
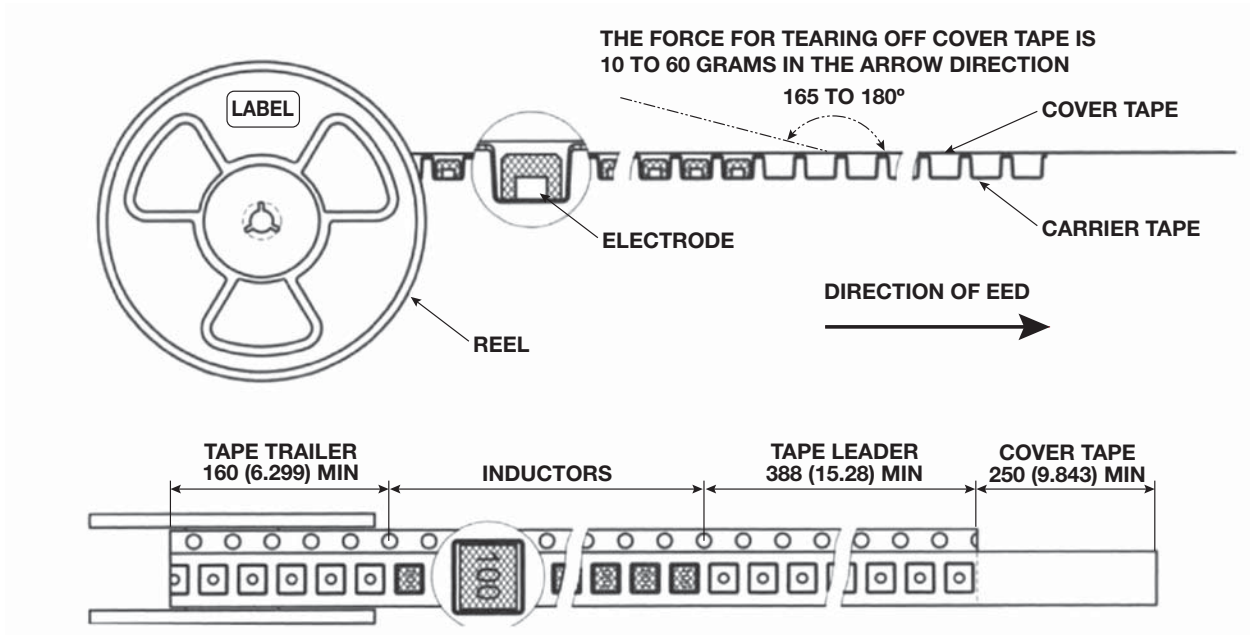


# LMax SMD Power Inductor



## LMMN Series – Miniature Style M

### PACKAGING SPECIFICATIONS



Size Code	Tape Size (mm)		SPQ (pcs)	
	W	P	7"	13"
0202	8	4	2000	-
02A2	8	4	2000	-
02B2	8	4	2000	-
0302	8	4	2000	-
03A2	8	4	2000	-
0403	12	8	500	-
0605	16	12	-	1000

# LMax Low Profile Power Inductor



## LMLP Series – Style C

### FEATURES

- Small and low profile inductor
- It corresponds to high current
- Simple and original magnetic shield structure

### APPLICATIONS

- For small DC/DC converter (cellular phone, HDD, DVC, DSC, PDA, LCD display etc.)

### CHARACTERISTICS

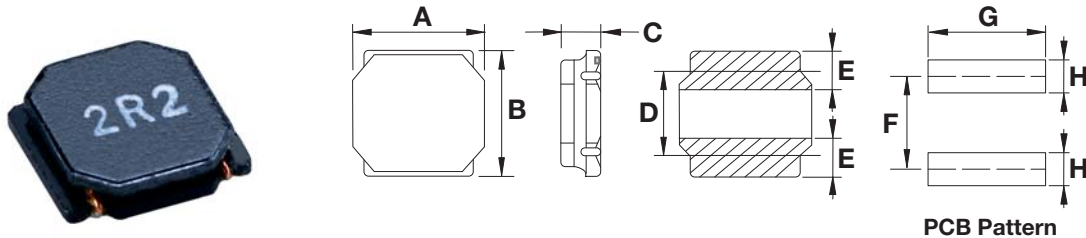
- Rated DC Current: The current when the inductance becomes 30% lower than its initial value.
- Operating temperature range: -40°C ~ +85°C

### INDUCTANCE AND RATED CURRENT RANGES

• 0202	2.2 ~ 22μH	1.290 ~ 0.390A
• 0303	1.0 ~ 47μH	1.30 ~ 0.220A
• 03A3	1.0 ~ 47μH	1.50 ~ 0.250A
• 03B3	1.0 ~ 47μH	2.10 ~ 0.320A
• 0404	1.0 ~ 47μH	1.80 ~ 0.240A
• 04A4	1.0 ~ 47μH	2.50 ~ 0.350A
• 04B4	1.0 ~ 220μH	4.0 ~ 0.270A
• 0505	10μH	1.00A
• 05B5	1.50 ~ 22.0μH	3.35 ~ 0.90A
• 05D5	1.50 ~ 47.0μH	6.00 ~ 1.10A
• 0606	4.7 ~ 10.0μH	1.40 ~ 1.00A
• 06A6	2.50 ~ 100μH	2.10 ~ 0.35A
• 06B6	0.80 ~ 22.0μH	5.50 ~ 1.05A
• 06C6	1.50 ~ 100μH	5.00 ~ 0.62A
• 06D6	1.30 ~ 100μH	8.00 ~ 0.80A
• 0808	0.90 ~ 100μH	11.0 ~ 1.00A



### DIMENSIONS



Type	A	B	C max	D	E	F	G	H
0202	2.40 ± 0.10 (0.095 ± 0.004)	2.40 ± 0.10 (0.095 ± 0.004)	1.00 (0.039)	1.45 ± 0.20 (0.057 ± 0.008)	0.60 ± 0.20 (0.240 ± 0.008)	1.45 (0.057)	2.00 (0.079)	0.70 (0.028)
0303	3.00 ± 0.20 (0.118 ± 0.008)	3.00 ± 0.20 (0.118 ± 0.008)	1.00 (0.039)	1.90 ± 0.20 (0.075 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)	2.20 (0.087)	2.70 (0.106)	0.80 (0.032)
03A3	3.00 ± 0.20 (0.118 ± 0.008)	3.00 ± 0.20 (0.118 ± 0.008)	1.20 (0.047)	1.90 ± 0.20 (0.075 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)	2.20 (0.087)	2.70 (0.106)	0.80 (0.032)
03B3	3.00 ± 0.20 (0.118 ± 0.008)	3.00 ± 0.20 (0.118 ± 0.008)	1.50 (0.059)	1.90 ± 0.20 (0.075 ± 0.008)	0.90 ± 0.20 (0.035 ± 0.008)	2.20 (0.087)	2.70 (0.106)	0.80 (0.032)
0404	4.00 ± 0.20 (0.157 ± 0.008)	4.00 ± 0.20 (0.157 ± 0.008)	1.00 (0.039)	2.50 ± 0.20 (0.099 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	2.80 (0.110)	3.70 (0.146)	1.20 (0.047)
04A4	4.00 ± 0.20 (0.157 ± 0.008)	4.00 ± 0.20 (0.157 ± 0.008)	1.20 (0.047)	2.50 ± 0.20 (0.099 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	2.80 (0.110)	3.70 (0.146)	1.20 (0.047)
04B4	4.00 ± 0.20 (0.157 ± 0.008)	4.00 ± 0.20 (0.157 ± 0.008)	1.80 (0.071)	2.50 ± 0.20 (0.099 ± 0.008)	1.10 ± 0.20 (0.043 ± 0.008)	2.80 (0.110)	3.70 (0.146)	1.20 (0.047)
0505	5.00 ± 0.20 (0.197 ± 0.008)	5.00 ± 0.20 (0.197 ± 0.008)	1.00 (0.039)	3.50 ± 0.20 (0.138 ± 0.008)	1.50 ± 0.20 (0.059 ± 0.008)	3.80 (0.150)	4.70 (0.185)	1.60 (0.063)
05B5	5.00 ± 0.20 (0.197 ± 0.008)	5.00 ± 0.20 (0.197 ± 0.008)	2.00 (0.078)	3.50 ± 0.20 (0.138 ± 0.008)	1.50 ± 0.20 (0.059 ± 0.008)	3.80 (0.150)	4.70 (0.185)	1.60 (0.063)
05D5	5.00 ± 0.20 (0.197 ± 0.008)	5.00 ± 0.20 (0.197 ± 0.008)	4.00 (0.157)	3.50 ± 0.20 (0.138 ± 0.008)	1.50 ± 0.20 (0.059 ± 0.008)	3.80 (0.150)	4.70 (0.185)	1.60 (0.063)
0606	6.00 ± 0.20 (0.236 ± 0.008)	6.00 ± 0.20 (0.236 ± 0.008)	1.00 ± 0.10 (0.039 ± 0.004)	4.00 ± 0.20 (0.157 ± 0.008)	1.35 ± 0.20 (0.053 ± 0.008)	4.70 (0.185)	5.70 (0.224)	1.60 (0.063)
06A6	6.00 ± 0.20 (0.236 ± 0.008)	6.00 ± 0.20 (0.236 ± 0.008)	1.20 (0.047)	4.00 ± 0.20 (0.157 ± 0.008)	1.35 ± 0.20 (0.053 ± 0.008)	4.70 (0.185)	5.70 (0.224)	1.60 (0.063)
06B6	6.00 ± 0.20 (0.236 ± 0.008)	6.00 ± 0.20 (0.236 ± 0.008)	2.00 (0.078)	4.00 ± 0.20 (0.157 ± 0.008)	1.35 ± 0.20 (0.053 ± 0.008)	4.70 (0.185)	5.70 (0.224)	1.60 (0.063)
06C6	6.00 ± 0.20 (0.236 ± 0.008)	6.00 ± 0.20 (0.236 ± 0.008)	2.80 (0.110)	4.00 ± 0.20 (0.157 ± 0.008)	1.35 ± 0.20 (0.053 ± 0.008)	4.70 (0.185)	5.70 (0.224)	1.60 (0.063)
06D6	6.00 ± 0.20 (0.236 ± 0.008)	6.00 ± 0.20 (0.236 ± 0.008)	4.50 (0.177)	4.00 ± 0.20 (0.157 ± 0.008)	1.35 ± 0.20 (0.053 ± 0.008)	4.70 (0.185)	5.70 (0.224)	1.60 (0.063)
0808	8.00 ± 0.20 (0.315 ± 0.008)	8.00 ± 0.20 (0.315 ± 0.008)	4.20 (0.165)	5.60 ± 0.30 (0.220 ± 0.011)	1.60 ± 0.30 (0.063 ± 0.011)	5.60 (0.220)	7.50 (0.188)	1.80 (0.071)



# LMax Low Profile Power Inductor



## LMLP Series – Style C

### HOW TO ORDER

<b>LM</b> ┆ ┆ ┆	<b>LP</b> ┆ ┆ ┆	<b>0303</b> ┆ ┆ ┆	<b>M</b> ┆ ┆ ┆	<b>R04</b> ┆ ┆ ┆	<b>C</b> ┆ ┆ ┆	<b>T</b> ┆ ┆ ┆	<b>A</b> ┆ ┆ ┆	<b>S</b> ┆ ┆ ┆
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	LP = Low Profile	0303 = 3x3xh 03A3 = 3x3xA(h) (h = see catalog)	M = 20% N = 30%	R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH		T = Sn Plate	A = Standard	R = 7" Reel S = 13" Reel

### ELECTRICAL CHARACTERISTICS

#### 0202

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N2R2	2.20	±30%	1.29	0.97	0.15
N3R3	3.30	±30%	1.00	0.77	0.22
N4R7	4.70	±30%	0.88	0.67	0.29
N6R8	6.80	±30%	0.75	0.57	0.41
M100	10.0	±20%	0.55	0.45	0.69
M150	15.0	±20%	0.47	0.37	1.02
M220	22.0	±20%	0.39	0.30	1.47

#### 0303

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R0	1.00	±30%	1.30	1.40	0.065
N1R5	1.50	±30%	1.20	1.30	0.08
N2R2	2.20	±30%	1.10	1.10	0.095
N3R3	3.30	±30%	0.87	0.94	0.14
N4R7	4.70	±30%	0.75	0.78	0.19
N6R8	6.80	±30%	0.61	0.63	0.30
M100	10.0	±20%	0.50	0.51	0.45
M150	15.0	±20%	0.40	0.40	0.74
M220	22.0	±20%	0.35	0.35	1.03
M330	33.0	±20%	0.26	0.275	1.55
M470	47.0	±20%	0.22	0.235	2.05

#### 03A3

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R0	1.00	±30%	1.50	1.49	0.05
N1R5	1.50	±30%	1.36	1.40	0.06
N2R2	2.20	±30%	1.10	1.20	0.08
N3R3	3.30	±30%	0.91	1.05	0.10
N4R7	4.70	±30%	0.77	0.98	0.13
N6R8	6.80	±30%	0.67	0.74	0.19
M100	10.0	±20%	0.54	0.63	0.29
M150	15.0	±20%	0.44	0.485	0.45
M220	22.0	±20%	0.37	0.42	0.63
M330	33.0	±20%	0.31	0.33	1.03
M470	47.0	±20%	0.25	0.28	1.45

# LMax Low Profile Power Inductor



## LMLP Series – Style C

### 03B3

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R0	1.00	±30%	2.10	2.10	0.03
N1R5	1.50	±30%	1.80	1.82	0.04
N2R2	2.20	±30%	1.48	1.50	0.06
N3R3	3.30	±30%	1.21	1.23	0.08
N4R7	4.70	±30%	1.02	1.04	0.12
N6R8	6.80	±30%	0.87	0.88	0.16
M100	10.0	±20%	0.70	0.71	0.23
M150	15.0	±20%	0.56	0.56	0.36
M220	22.0	±20%	0.47	0.47	0.52
M330	33.0	±20%	0.39	0.37	0.84
M470	47.0	±20%	0.32	0.30	1.34

### 0404

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R0	1.00	±30%	1.80	1.05	0.10
N2R2	2.20	±30%	1.15	0.89	0.15
N3R3	3.30	±30%	1.10	0.82	0.18
N4R7	4.70	±30%	0.90	0.75	0.21
N6R8	6.80	±30%	0.74	0.62	0.30
M100	10.0	±30%	0.56	0.60	0.38
M150	15.0	±20%	0.47	0.51	0.51
M220	22.0	±20%	0.36	0.40	0.87
M330	33.0	±20%	0.28	0.30	1.54
M470	47.0	±20%	0.24	0.28	1.81

### 04A4

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R0	1.00	±30%	2.50	1.50	0.06
N2R2	2.20	±30%	1.65	1.20	0.09
N3R3	3.30	±30%	1.20	0.98	0.13
N4R7	4.70	±30%	1.05	0.96	0.14
N6R8	6.80	±30%	0.90	0.84	0.18
M100	10.0	±20%	0.74	0.77	0.24
M150	15.0	±20%	0.56	0.60	0.40
M220	22.0	±20%	0.51	0.54	0.48
M330	33.0	±20%	0.40	0.42	0.81
M470	47.0	±20%	0.35	0.37	1.00

# LMax Low Profile Power Inductor



## LMLP Series – Style C

### 04B4

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R0	1.00	±30%	4.00	1.83	0.03
N2R2	2.20	±30%	2.70	1.44	0.06
N3R3	3.30	±30%	2.00	1.23	0.07
N4R7	4.70	±30%	1.70	1.20	0.09
N6R8	6.80	±30%	1.45	1.06	0.11
M100	10.0	±20%	1.20	0.84	0.18
M150	15.0	±20%	0.94	0.65	0.28
M220	22.0	±20%	0.80	0.59	0.36
M330	33.0	±20%	0.65	0.49	0.53
M470	47.0	±20%	0.57	0.42	0.65
M680	68.0	±20%	0.47	0.32	1.00
M101	100	±20%	0.40	0.27	1.50
M151	150	±20%	0.31	0.22	2.50
M221	220	±20%	0.27	0.17	4.00

### 0505

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
M100	10.0	±20%	1.00	0.94	0.48

### 05B5

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R5	1.50	±30%	3.35	3.20	0.026
N2R2	2.20	±30%	2.90	2.90	0.035
N3R3	3.30	±30%	2.40	2.40	0.048
N4R7	4.70	±30%	2.00	2.00	0.06
N6R8	6.80	±30%	1.60	1.65	0.090
M100	10.0	±20%	1.30	1.45	0.12
M150	15.0	±20%	1.10	1.20	0.165
M220	22.0	±20%	0.90	1.00	0.26

### 05D5

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R5	1.50	±30%	6.00	3.60	0.02
N2R2	2.20	±30%	4.60	3.50	0.022
N3R3	3.30	±30%	3.80	3.30	0.027
N4R7	4.70	±30%	3.30	3.10	0.029
N6R8	6.80	±30%	2.60	2.30	0.049
M100	10.0	±20%	2.30	2.10	0.056
M150	15.0	±20%	2.00	1.80	0.08
M220	22.0	±20%	1.60	1.40	0.126
M330	33.0	±20%	1.30	1.20	0.18
M470	47.0	±20%	1.10	0.90	0.31

# LMax Low Profile Power Inductor



## LMLP Series – Style C

### 0606

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N4R7	4.70	±30%	1.40	1.40	0.29
N6R8	6.80	±30%	1.20	1.00	0.372
M100	10.0	±20%	1.00	0.85	0.50

### 06A6

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N2R5	2.50	±30%	2.10	1.73	0.09
N4R0	4.00	±30%	1.80	1.57	0.105
N5R0	5.00	±30%	1.50	1.40	0.11
N6R8	6.80	±30%	1.30	1.18	0.165
M100	10.0	±20%	1.00	1.00	0.235
M150	15.0	±20%	0.80	0.79	0.33
M220	22.0	±20%	0.76	0.63	0.530
M330	33.0	±20%	0.59	0.53	0.70
M470	47.0	±20%	0.52	0.46	1.05
M680	68.0	±20%	0.44	0.41	1.35
M101	100	±20%	0.35	0.32	2.18

### 06B6

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N0R8	0.80	±30%	5.50	3.80	0.02
N1R5	1.50	±30%	4.00	3.20	0.026
N2R2	2.20	±30%	3.20	2.70	0.034
N3R3	3.30	±30%	2.80	2.60	0.04
N4R7	4.70	±30%	2.40	2.00	0.058
N6R8	6.80	±30%	2.00	1.80	0.085
M100	10.0	±20%	1.70	1.40	0.125
M220	22.0	±20%	1.05	0.95	0.29

### 06C6

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R5	1.50	±30%	5.00	4.20	0.016
N2R2	2.20	±30%	4.20	3.70	0.02
N3R0	3.00	±30%	3.60	3.40	0.023
N4R7	4.70	±30%	2.70	3.00	0.031
N6R0	6.00	±30%	2.50	2.50	0.04
M100	10.0	±20%	1.90	1.90	0.065
M150	15.0	±20%	1.60	1.80	0.095
M220	22.0	±20%	1.30	1.40	0.135
M330	33.0	±20%	1.10	1.10	0.22
M470	47.0	±20%	0.95	0.92	0.30
M680	68.0	±20%	0.76	0.77	0.42
M101	100	±20%	0.62	0.66	0.60



# LMax Low Profile Power Inductor



## LMLP Series – Style C

### 06D6

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N1R3	1.30	±30%	8.00	4.00	0.016
N1R8	1.80	±30%	7.00	3.70	0.018
N2R3	2.30	±30%	6.00	3.50	0.021
N3R0	3.00	±30%	5.00	3.20	0.024
N4R5	4.50	±30%	4.00	3.00	0.031
N6R3	6.30	±30%	3.80	2.80	0.038
M100	10.0	±20%	3.00	2.50	0.047
M150	15.0	±20%	2.30	1.90	0.077
M220	22.0	±20%	1.90	1.50	0.115
M330	33.0	±20%	1.50	1.40	0.145
M470	47.0	±20%	1.30	1.10	0.22
M680	68.0	±20%	1.00	0.90	0.33
M101	100	±20%	0.80	0.70	0.50

### 0808

Code	Inductance L(μH) At 100KHz, 1.0V	Tolerance	Rated Current (A)		DC Resistance (Ω) ±20%
			Saturation Current Idc1	Temperature Rise Current Idc2	
N0R9	0.90	±30%	11.0	7.80	0.006
N1R4	1.40	±30%	9.00	7.00	0.007
N2R0	2.00	±30%	7.40	6.30	0.009
N3R6	3.60	±30%	5.30	4.90	0.015
N4R7	4.70	±30%	4.70	4.10	0.018
N6R8	6.80	±30%	4.00	3.70	0.025
M100	10.0	±20%	3.40	3.10	0.034
M150	15.0	±20%	2.70	2.40	0.05
M220	22.0	±20%	2.20	2.20	0.066
M330	33.0	±20%	1.90	1.70	0.10
M470	47.0	±20%	1.50	1.40	0.15
M680	68.0	±20%	1.20	1.10	0.23
M101	100	±20%	1.00	1.00	0.29

NOTES:

1. Operating Temp: -25°C±120°C
2. The saturation current value (Idc1) is the DC current value having inductance decrease down 30% (at 20°C).
3. The temperature rise current value (Idc2) is the DC current value having temperature increase up to 40°C (at 20°C).
4. The rated current is the DC current value that satisfies both of current value saturation current value and temperature rise current value.

# LMax Low Profile/High Current Power Inductor



## LMLP Series – Style D

### FEATURES

- Shielded Construction
- Large Current Rating
- Lower Temperature Rise
- Low Profile
- Available on tape and reel

### APPLICATIONS

- Personal Computers
- Servers
- High Current POL Converters
- Low Profile High Current Power Supplies
- DC/DC Converters
- DC/DC Converters for FPGA

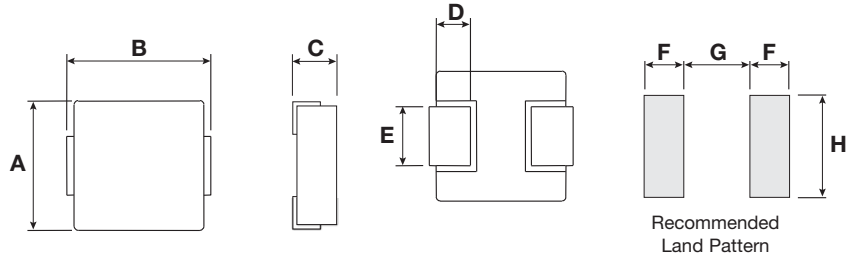
### INDUCTANCE AND RATED CURRENT RANGES

• 0405	0.1 $\mu$ H ~ 3.3 $\mu$ H	22 ~ 4 A
• 05A6	0.1 $\mu$ H ~ 4.7 $\mu$ H	45 ~ 5 A
• 0506	0.1 $\mu$ H ~ 4.7 $\mu$ H	27 ~ 8.2 A
• 0707	0.1 $\mu$ H ~ 4.7 $\mu$ H	40 ~ 8 A
• 07A7	0.1 $\mu$ H ~ 10 $\mu$ H	50 ~ 7 A
• 07B7	0.1 $\mu$ H ~ 10 $\mu$ H	60 ~ 7 A
• 07C7	0.56 $\mu$ H ~ 10 $\mu$ H	12 ~ 4.5 A
• 1011	0.19 $\mu$ H ~ 47 $\mu$ H	90 ~ 3 A
• 13A3	0.1 $\mu$ H ~ 10 $\mu$ H	84 ~ 14 A
• 1313	0.1 $\mu$ H ~ 10 $\mu$ H	118 ~ 16 A
• 13B3	0.1 $\mu$ H ~ 10 $\mu$ H	120 ~ 15.5 A

- All test data taken at 25°C
- Operating Temperature Range: -55°C ~ +155°C
- I<sub>SAT</sub>: The current that causes an inductance drop of approximately 25% (30% on 0405 size).
- I<sub>DC</sub>: DC Current that causes an approximate  $\Delta$ T of 40°C.



### DIMENSIONS



mm (inches)

Type	A	B	C	D	E	F	G	H
0405	4.10±0.50 (0.161±0.020)	4.50±0.50 (0.177±0.020)	2.10 (0.083)	0.80±0.50 (0.031±0.020)	1.50±0.50 (0.059±0.020)	1.50 (0.059)	2.50 (0.098)	2.20 (0.087)
05A6	5.00±0.50 (0.197±0.020)	5.50±0.50 (0.217±0.020)	2.00 (0.083)	1.20±0.50 (0.047±0.020)	1.50±0.50 (0.059±0.020)	2.00 (0.079)	3.00 (0.118)	2.50 (0.098)
0506	5.00±0.50 (0.197±0.020)	5.50±0.50 (0.217±0.020)	3.00 (0.118)	1.20±0.50 (0.047±0.020)	1.50±0.50 (0.059±0.020)	2.00 (0.079)	3.00 (0.118)	2.50 (0.098)
0707	6.80 max (0.278 max)	7.50 max (0.295 max)	2.00 (0.083)	1.60±0.50 (0.063±0.020)	2.90±0.50 (0.114±0.020)	2.50 (0.098)	3.70 (0.146)	3.50 (0.138)
07B7	6.80 max (0.278 max)	7.50 max (0.295 max)	2.50 (0.098)	1.60±0.50 (0.063±0.020)	2.90±0.50 (0.114±0.020)	2.50 (0.098)	3.70 (0.146)	3.50 (0.138)
07A7	6.80 max (0.278 max)	7.50 max (0.295 max)	3.00 (0.118)	1.60±0.50 (0.063±0.020)	2.90±0.50 (0.114±0.020)	2.50 (0.098)	3.70 (0.146)	3.50 (0.138)
07C7	6.80 max (0.278 max)	7.50 max (0.295 max)	5.00 (0.197)	1.60±0.50 (0.063±0.020)	2.90±0.50 (0.114±0.020)	2.50 (0.098)	3.70 (0.146)	3.50 (0.138)
1011	10.4 max (0.409 max)	11.5 max (0.453 max)	4.00 (0.157)	2.00±0.50 (0.079±0.020)	2.90±0.50 (0.114±0.020)	3.50 (0.138)	6.00 (0.236)	4.00 (0.157)
13A3	13.0 max (0.512 max)	14.2 max (0.559 max)	4.00 (0.157)	2.30±0.50 (0.091±0.020)	3.80±0.50 (0.150±0.020)	2.90 (0.114)	7.90 (0.311)	5.00 (0.197)
1313	13.0 max (0.512 max)	14.2 max (0.559 max)	5.00 (0.197)	2.30±0.50 (0.091±0.020)	3.80±0.50 (0.150±0.020)	2.90 (0.114)	7.90 (0.311)	5.00 (0.197)
13B3	13.0 max (0.512 max)	14.2 max (0.559 max)	6.50 (0.256)	2.30±0.50 (0.091±0.020)	3.80±0.50 (0.150±0.020)	2.90 (0.114)	7.90 (0.311)	5.00 (0.197)

# LMax Low Profile/High Current Power Inductor



## LMLP Series – Style D

### HOW TO ORDER

<b>LM</b> ┆ ┆ ┆	<b>LP</b> ┆ ┆ ┆	<b>0707</b> ┆ ┆ ┆	<b>M</b> ┆ ┆ ┆	<b>R04</b> ┆ ┆ ┆	<b>D</b> ┆ ┆ ┆	<b>T</b> ┆ ┆ ┆	<b>A</b> ┆ ┆ ┆	<b>S</b> ┆ ┆ ┆
<b>Family</b>	<b>Series</b>	<b>Size</b>	<b>Tolerance</b>	<b>Inductance</b>	<b>Style</b>	<b>Termination</b>	<b>Special</b>	<b>Packaging</b>
LM = Power Inductor	LP = Low Profile	0707 = 7x7xh 07A7 = 7x7xA(h) (h = see catalog)	M = 20%	R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH		T = Sn Plate	A = Standard	S = 13" Reel

### ELECTRICAL CHARACTERISTICS

#### 0405

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	ISAT (A)	IDC (A)
LMLP0405MR10DTAS	0.1	±20%	100KHz, 0.25V	4	22	12
LMLP0405MR22DTAS	0.22	±20%	100KHz, 0.25V	6.6	12.5	9
LMLP0405MR47DTAS	0.47	±20%	100KHz, 0.25V	14	9.5	7
LMLP0405MR56DTAS	0.56	±20%	100KHz, 0.25V	16	8.5	6.5
LMLP0405M1R0DTAS	1	±20%	100KHz, 0.25V	27	7	4.5
LMLP0405M1R5DTAS	1.5	±20%	100KHz, 0.25V	46	6	4
LMLP0405M2R2DTAS	2.2	±20%	100KHz, 0.25V	58	5	3
LMLP0405M3R3DTAS	3.3	±20%	100KHz, 0.25V	87	4	2.5

#### 05A6

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	ISAT (A)	IDC (A)
LMLP05A6MR10DTAS	0.1	±20%	100KHz, 0.25V	3.9	45	17
LMLP05A6MR22DTAS	0.22	±20%	100KHz, 0.25V	5.2	22	15
LMLP05A6MR33DTAS	0.33	±20%	100KHz, 0.25V	8.2	25	12
LMLP05A6MR47DTAS	0.47	±20%	100KHz, 0.25V	9.4	21	11.5
LMLP05A6MR68DTAS	0.68	±20%	100KHz, 0.25V	12.4	15	10
LMLP05A6M1R0DTAS	1	±20%	100KHz, 0.25V	20	16	7
LMLP05A6M2R2DTAS	2.2	±20%	100KHz, 0.25V	50.1	12.5	4.2
LMLP05A6M3R3DTAS	3.3	±20%	100KHz, 0.25V	85.5	8.5	3.3
LMLP05A6M4R7DTAS	4.7	±20%	100KHz, 0.25V	116.6	5	2.8

#### 0506

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	ISAT (A)	IDC (A)
LMLP0506MR10DTAS	0.1	±20%	100KHz, 0.25V	3.16	27	23
LMLP0506MR22DTAS	0.22	±20%	100KHz, 0.25V	4.52	21	15.5
LMLP0506MR33DTAS	0.33	±20%	100KHz, 0.25V	5.56	19	13.7
LMLP0506MR47DTAS	0.47	±20%	100KHz, 0.25V	7.04	16	12.2
LMLP0506MR68DTAS	0.68	±20%	100KHz, 0.25V	8.96	13.5	10.2
LMLP0506MR82DTAS	0.82	±20%	100KHz, 0.25V	11.9	13	9.3
LMLP0506M1R0DTAS	1	±20%	100KHz, 0.25V	13.7	12	9.2
LMLP0506M1R5DTAS	1.5	±20%	100KHz, 0.25V	20.7	11	7.2
LMLP0506M2R2DTAS	2.2	±20%	100KHz, 0.25V	29.2	10	5.8
LMLP0506M3R3DTAS	3.3	±20%	100KHz, 0.25V	54.7	8.5	5
LMLP0506M4R7DTAS	4.7	±20%	100KHz, 0.25V	77.5	8.2	3.5

ISAT: The current that causes an inductance drop of approximately 25% (30% on 0405 size).

IDC: DC Current that causes an approximate ΔT of 40°C.

# LMax Low Profile/High Current Power Inductor



## LMLP Series – Style D

### 0707

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	IsAT (A)	I <sub>DC</sub> (A)
LMLP0707MR10DTAS	0.1	±20%	100KHz, 0.25V	3.5	40	18
LMLP0707MR15DTAS	0.15	±20%	100KHz, 0.25V	5.2	38	15
LMLP0707MR22DTAS	0.22	±20%	100KHz, 0.25V	5.7	26	14
LMLP0707MR33DTAS	0.33	±20%	100KHz, 0.25V	7	18	12
LMLP0707MR47DTAS	0.47	±20%	100KHz, 0.25V	9.3	18	11
LMLP0707MR68DTAS	0.68	±20%	100KHz, 0.25V	13.9	17	9
LMLP0707MR82DTAS	0.82	±20%	100KHz, 0.25V	15.9	17	8
LMLP0707M1R0DTAS	1	±20%	100KHz, 0.25V	18.3	14	7
LMLP0707M1R5DTAS	1.5	±20%	100KHz, 0.25V	34	11.5	4
LMLP0707M2R2DTAS	2.2	±20%	100KHz, 0.25V	46	13	3.75
LMLP0707M3R3DTAS	3.3	±20%	100KHz, 0.25V	60.1	10	3.25
LMLP0707M4R7DTAS	4.7	±20%	100KHz, 0.25V	78	8	3

### 07B7

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	IsAT (A)	I <sub>DC</sub> (A)
LMLP07B7MR10DTAS	0.1	±20%	100KHz, 0.25V	1.7	50	30
LMLP07B7MR22DTAS	0.22	±20%	100KHz, 0.25V	3.2	34	21
LMLP07B7MR33DTAS	0.33	±20%	100KHz, 0.25V	4.1	22	18
LMLP07B7MR47DTAS	0.47	±20%	100KHz, 0.25V	6.5	21	13.5
LMLP07B7MR68DTAS	0.68	±20%	100KHz, 0.25V	9.4	18	11
LMLP07B7MR82DTAS	0.82	±20%	100KHz, 0.25V	11.8	17	10
LMLP07B7M1R0DTAS	1	±20%	100KHz, 0.25V	14.2	16	9
LMLP07B7M1R5DTAS	1.5	±20%	100KHz, 0.25V	21.2	15	7.5
LMLP07B7M2R2DTAS	2.2	±20%	100KHz, 0.25V	34	14	6.5
LMLP07B7M3R3DTAS	3.3	±20%	100KHz, 0.25V	51.6	13	5
LMLP07B7M4R7DTAS	4.7	±20%	100KHz, 0.25V	63	10	4.5
LMLP07B7M6R8DTAS	6.8	±20%	100KHz, 0.25V	95	9	3.5
LMLP07B7M8R2DTAS	8.2	±20%	100KHz, 0.25V	106	8	3
LMLP07B7M100DTAS	10	±20%	100KHz, 0.25V	129	7	2.5

### 07A7

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	IsAT (A)	I <sub>DC</sub> (A)
LMLP07A7MR10DTAS	0.1	±20%	100KHz, 0.25V	1.7	60	32.5
LMLP07A7MR22DTAS	0.22	±20%	100KHz, 0.25V	2.8	40	23
LMLP07A7MR33DTAS	0.33	±20%	100KHz, 0.25V	3.9	30	20
LMLP07A7MR47DTAS	0.47	±20%	100KHz, 0.25V	4.2	26	17.5
LMLP07A7MR68DTAS	0.68	±20%	100KHz, 0.25V	5.5	25	15.5
LMLP07A7MR82DTAS	0.82	±20%	100KHz, 0.25V	8	24	13
LMLP07A7M1R0DTAS	1	±20%	100KHz, 0.25V	10	22	11
LMLP07A7M1R5DTAS	1.5	±20%	100KHz, 0.25V	15	18	9
LMLP07A7M2R2DTAS	2.2	±20%	100KHz, 0.25V	20	14	8
LMLP07A7M3R3DTAS	3.3	±20%	100KHz, 0.25V	30	13.5	6
LMLP07A7M4R7DTAS	4.7	±20%	100KHz, 0.25V	40	10	5.5
LMLP07A7M6R8DTAS	6.8	±20%	100KHz, 0.25V	60	8	4.5
LMLP07A7M8R2DTAS	8.2	±20%	100KHz, 0.25V	68	7.5	4
LMLP07A7M100DTAS	10	±20%	100KHz, 0.25V	105	7	3

IsAT: The current that causes an inductance drop of approximately 25%.  
 I<sub>DC</sub>: DC Current that causes an approximate ΔT of 40°C.

# LMax Low Profile/High Current Power Inductor



## LMLP Series – Style D

### 07C7

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	IsAT (A)	I <sub>DC</sub> (A)
LMLP07C7MR56DTAS	0.56	±20%	100KHz, 0.25V	3.6	12	20
LMLP07C7MR68DTAS	0.68	±20%	100KHz, 0.25V	4.5	11.5	18
LMLP07C7MR82DTAS	0.82	±20%	100KHz, 0.25V	4.9	13	16.5
LMLP07C7M1R0DTAS	1	±20%	100KHz, 0.25V	6.5	15	13
LMLP07C7M1R5DTAS	1.5	±20%	100KHz, 0.25V	9	12	12
LMLP07C7M2R2DTAS	2.2	±20%	100KHz, 0.25V	13.6	10	10
LMLP07C7M3R3DTAS	3.3	±20%	100KHz, 0.25V	20.9	8	8
LMLP07C7M4R7DTAS	4.7	±20%	100KHz, 0.25V	30.3	7	6.5
LMLP07C7M5R6DTAS	5.6	±20%	100KHz, 0.25V	34.4	7	6
LMLP07C7M6R8DTAS	6.8	±20%	100KHz, 0.25V	44.6	5.5	5.5
LMLP07C7M8R2DTAS	8.2	±20%	100KHz, 0.25V	50.7	5	5
LMLP07C7M100DTAS	10	±20%	100KHz, 0.25V	71.3	4.5	4.5

### 1011

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	IsAT (A)	I <sub>DC</sub> (A)
LMLP1011MR19DTAS	0.19	±20%	100KHz, 0.25V	0.95	90	40
LMLP1011MR36DTAS	0.36	±20%	100KHz, 0.25V	1.4	60	31.5
LMLP1011MR47DTAS	0.47	±20%	100KHz, 0.25V	1.6	38	26
LMLP1011MR56DTAS	0.56	±20%	100KHz, 0.25V	1.8	49	27.5
LMLP1011M1R0DTAS	1	±20%	100KHz, 0.25V	4.1	36	17.5
LMLP1011M1R5DTAS	1.5	±20%	100KHz, 0.25V	5.8	27.5	15
LMLP1011M2R2DTAS	2.2	±20%	100KHz, 0.25V	9	25.6	12
LMLP1011M3R3DTAS	3.3	±20%	100KHz, 0.25V	11.8	18.6	10
LMLP1011M4R7DTAS	4.7	±20%	100KHz, 0.25V	16.5	17	9.5
LMLP1011M5R6DTAS	5.6	±20%	100KHz, 0.25V	19.3	16	8.5
LMLP1011M6R8DTAS	6.8	±20%	100KHz, 0.25V	23.3	13.5	8
LMLP1011M100DTAS	10	±20%	100KHz, 0.25V	36.5	12	6.8
LMLP1011M150DTAS	15	±20%	100KHz, 0.25V	65	7	3.5
LMLP1011M220DTAS	22	±20%	100KHz, 0.25V	120	3	2
LMLP1011M330DTAS	33	±20%	100KHz, 0.25V	200	2.8	1.8
LMLP1011M470DTAS	47	±20%	100KHz, 0.25V	210	3	1.2

### 13A3

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	IsAT (A)	I <sub>DC</sub> (A)
LMLP13A3MR10DTAS	0.1	±20%	100KHz, 0.25V	0.96	84	43
LMLP13A3MR15DTAS	0.15	±20%	100KHz, 0.25V	1.2	75	41
LMLP13A3MR22DTAS	0.22	±20%	100KHz, 0.25V	1.3	65	38.5
LMLP13A3MR33DTAS	0.33	±20%	100KHz, 0.25V	1.5	62	36.5
LMLP13A3MR47DTAS	0.47	±20%	100KHz, 0.25V	2	55	32
LMLP13A3MR60DTAS	0.6	±20%	100KHz, 0.25V	2.2	51	29
LMLP13A3MR68DTAS	0.68	±20%	100KHz, 0.25V	2.5	49	28
LMLP13A3MR82DTAS	0.82	±20%	100KHz, 0.25V	3	44	25
LMLP13A3M1R0DTAS	1	±20%	100KHz, 0.25V	3.5	40	24
LMLP13A3M1R5DTAS	1.5	±20%	100KHz, 0.25V	5.5	35	19
LMLP13A3M1R8DTAS	1.8	±20%	100KHz, 0.25V	7	30	16.5
LMLP13A3M2R2DTAS	2.2	±20%	100KHz, 0.25V	8	29	16
LMLP13A3M3R3DTAS	3.3	±20%	100KHz, 0.25V	12	27	12
LMLP13A3M4R7DTAS	4.7	±20%	100KHz, 0.25V	15	24	10
LMLP13A3M5R6DTAS	5.6	±20%	100KHz, 0.25V	19	19	9.5
LMLP13A3M6R8DTAS	6.8	±20%	100KHz, 0.25V	22	18	9
LMLP13A3M8R2DTAS	8.2	±20%	100KHz, 0.25V	28	16	8.5
LMLP13A3M100DTAS	10	±20%	100KHz, 0.25V	34	14	7

I<sub>SAT</sub>: The current that causes an inductance drop of approximately 25%.

I<sub>DC</sub>: DC Current that causes an approximate ΔT of 40°C.

# LMax Low Profile/High Current Power Inductor



## LMLP Series – Style D

### 1313

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	IsAT (A)	I <sub>DC</sub> (A)
LMLP1313MR10DTAS	0.1	±20%	100KHz, 0.25V	6	118	55
LMLP1313MR22DTAS	0.22	±20%	100KHz, 0.25V	0.8	110	51
LMLP1313MR33DTAS	0.33	±20%	100KHz, 0.25V	1.1	80	42
LMLP1313MR47DTAS	0.47	±20%	100KHz, 0.25V	1.3	65	38
LMLP1313MR56DTAS	0.56	±20%	100KHz, 0.25V	1.5	55	36
LMLP1313MR68DTAS	0.68	±20%	100KHz, 0.25V	1.7	54	34
LMLP1313MR82DTAS	0.82	±20%	100KHz, 0.25V	2.3	53	31
LMLP1313M1R0DTAS	1	±20%	100KHz, 0.25V	2.5	50	29
LMLP1313M1R5DTAS	1.5	±20%	100KHz, 0.25V	4.1	48	23
LMLP1313M1R8DTAS	1.8	±20%	100KHz, 0.25V	4.9	40	19
LMLP1313M2R2DTAS	2.2	±20%	100KHz, 0.25V	5.5	32	20
LMLP1313M3R3DTAS	3.3	±20%	100KHz, 0.25V	9.2	32	15
LMLP1313M4R7DTAS	4.7	±20%	100KHz, 0.25V	15	27	12
LMLP1313M5R6DTAS	5.6	±20%	100KHz, 0.25V	16.5	22	11.5
LMLP1313M6R8DTAS	6.8	±20%	100KHz, 0.25V	18.5	21	11
LMLP1313M7R8DTAS	7.8	±20%	100KHz, 0.25V	20.5	18	10
LMLP1313M8R2DTAS	8.2	±20%	100KHz, 0.25V	22.5	18	9.5
LMLP1313M100DTAS	10	±20%	100KHz, 0.25V	25.5	16	9

### 13B3

AVX PN	Inductance (μH)	Tolerance	Test Condition	DCR (mΩ)	IsAT (A)	I <sub>DC</sub> (A)
LMLP13B3MR10DTAS	0.1	±20%	100KHz, 0.25V	0.5	120	60
LMLP13B3MR15DTAS	0.15	±20%	100KHz, 0.25V	0.6	118	55
LMLP13B3MR22DTAS	0.22	±20%	100KHz, 0.25V	0.7	112	53
LMLP13B3MR30DTAS	0.3	±20%	100KHz, 0.25V	0.8	72	48
LMLP13B3MR33DTAS	0.33	±20%	100KHz, 0.25V	0.9	65	46
LMLP13B3MR40DTAS	0.4	±20%	100KHz, 0.25V	1	64	44
LMLP13B3MR47DTAS	0.47	±20%	100KHz, 0.25V	1.2	63	41
LMLP13B3MR56DTAS	0.56	±20%	100KHz, 0.25V	1.4	62	37
LMLP13B3MR68DTAS	0.68	±20%	100KHz, 0.25V	1.6	60	35
LMLP13B3MR82DTAS	0.82	±20%	100KHz, 0.25V	1.9	50	33
LMLP13B3M1R0DTAS	1	±20%	100KHz, 0.25V	2	49	32
LMLP13B3M1R2DTAS	1.2	±20%	100KHz, 0.25V	2.5	48	30
LMLP13B3M1R5DTAS	1.5	±20%	100KHz, 0.25V	3	45	27
LMLP13B3M1R8DTAS	1.8	±20%	100KHz, 0.25V	3.2	41	24
LMLP13B3M2R2DTAS	2.2	±20%	100KHz, 0.25V	4.2	40	22
LMLP13B3M3R3DTAS	3.3	±20%	100KHz, 0.25V	6.8	35	18
LMLP13B3M4R7DTAS	4.7	±20%	100KHz, 0.25V	8.7	32	13.5
LMLP13B3M5R6DTAS	5.6	±20%	100KHz, 0.25V	10	32	13.5
LMLP13B3M6R8DTAS	6.8	±20%	100KHz, 0.25V	14	16.5	11.5
LMLP13B3M8R2DTAS	8.2	±20%	100KHz, 0.25V	15.5	16	10.5
LMLP13B3M100DTAS	10	±20%	100KHz, 0.25V	17.2	15.5	10

I<sub>SAT</sub>: The current that causes an inductance drop of approximately 25%.

I<sub>DC</sub>: DC Current that causes an approximate ΔT of 40°C.

# LMax Low Profile/High Current Power Inductor



## LMLP Series – Style D

### GENERAL CHARACTERISTICS

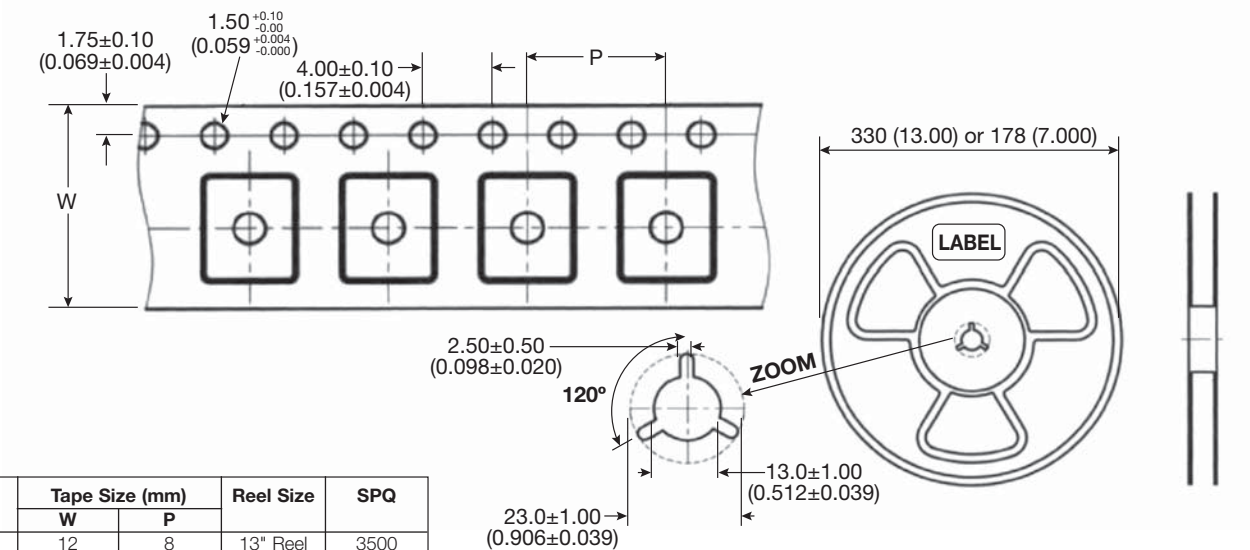
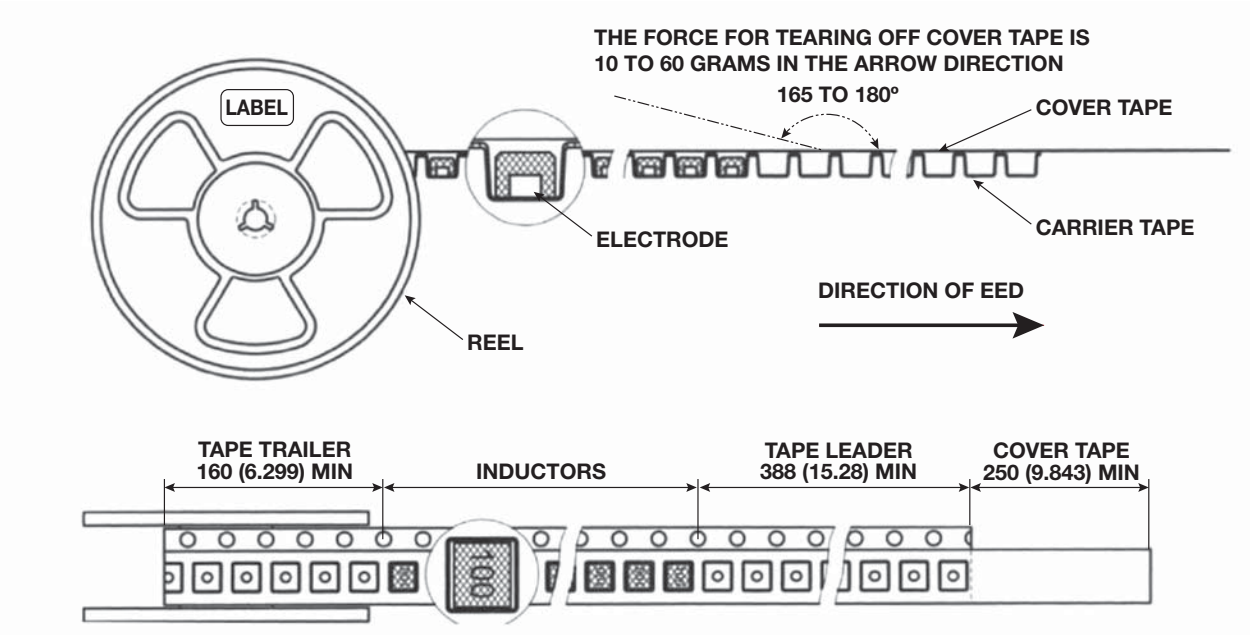
Items	Requirement	Test Methods		
Solderability	More than 90% of the terminal electrode should be covered with solder.	230±5°C for 4±1 seconds		
Solder Heat Resistance	Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance.	260±5°C for 4±1 seconds		
Heat Resistance	Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance.	Temperature: 125±5°C Time: 500 hours Tested after 2 hours at room temperature		
Cold Resistance	Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance.	Temperature: -40±5°C Time: 500 hours Tested after 2 hours at room temperature		
Thermal Shock	Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance.	<b>One Cycle</b>		
		Step	Temperature (°C)	Time (min.)
		1	-40±5°C	30
		2	Room Temperature	3
		3	125±5°C	30
4	Room Temperature	3		
Humidity Resistance	Inductance value must remain within 20% of initial value. No disconnection or short circuit. No change in appearance.	Temperature: 40±2°C at 90~95% relative humidity .		
		Time: 500 Hours		
		Tested after 2 hours at room temperature		
Vibration Test	Inductance value must remain within ±5% of initial value. No change in appearance	After 1 hour of vibrations testing, in each of three orientations at 10Hz, then increase to 55Hz, then decrease to 10Hz with 1.52mm P-P amplitudes.		



# LMax Low Profile/High Current Power Inductor



## LMLP Series – Style D



Size Code	Tape Size (mm)		Reel Size	SPQ
	W	P		
0405	12	8	13" Reel	3500
05A6	12	8	13" Reel	3000
0506	12	8	13" Reel	2500
0707	16	12	13" Reel	2000
07B7	16	12	13" Reel	2000
07A7	16	12	13" Reel	1500
07C7	16	12	13" Reel	800
1011	24	16	13" Reel	1000
13A3	24	16	13" Reel	1000
1313	24	16	13" Reel	500
13B3	24	16	13" Reel	500





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[CGA3E1X7R1C474K](#)