
HSC0603-Series

High Frequency SMD Inductor for Signal Line

FEATURES

- Can be used for high frequency bands up to GHz and stable inductance at high frequency.
- The high self resonant frequency realizes high Q value
- Resin-coated surface enables excellent mounting
- Low DC resistance design is ideal for low loss, high output and low power consumption.



APPLICATIONS

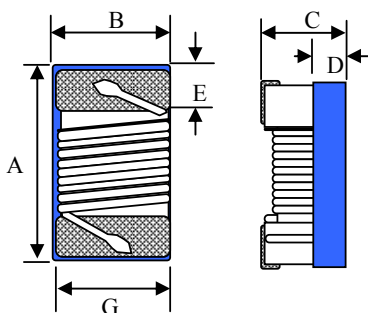
- For high-frequency applications including mobile phones, portable phones, such as PA, ANT, VCO, SAW, etc.
- Mobile phones such as GSM, CDMA, PDC, etc.
- Bluetooth, W-LAN

PRODUCT IDENTIFICATION

HSC 0603 - 10N J - T

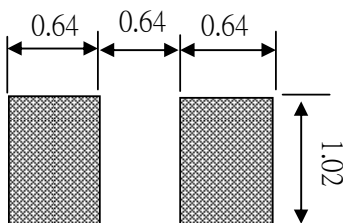
- | | |
|---------------------------------|------------------------------|
| (1) Product name | (4) Tolerance |
| (2) Shapes and Dimensions (LxW) | G : ±2% ; J : ±5% ; K : ±10% |
| (3) Inductance | (6) Taping style |
| 10N:10nH, 3N3:3.3nH | T : Taping ; None : Bulk |

SHAPES AND DIMENSIONS(Unit:mm)



- | | |
|----------|---------|
| A max. : | 1.8 mm |
| B max. : | 1.2 mm |
| C max. : | 1.02 mm |
| D ref. : | 0.45 mm |
| E : | 0.33 mm |
| G : | 0.90 mm |

RECOMMENDED FOOTPRINT(Unit:mm)



HSC0603-Series

High Frequency SMD Inductor for Signal Line

ELECTRICAL CHARACTERISTICS

| Our Product Part Number | Inductance (nH)/MHz | Inductance Tolerance | Q/MHz Min. | 900MHz | | 1.7GHz | | SRF(Min.) (MHz) | RDC (Ω)Max. | Irms Max. (mA) | Color Coding |
|----------------------------|------------------------|-------------------------|------------------|--------|-------|--------|-------|--------------------|-------------------------|-------------------|--------------|
| | | | | L typ | Q typ | L typ | Q typ | | | | |
| HSC0603-1N6□-T | 1.6/250 | J,K | 24/250 | 1.61 | 72.86 | 1.61 | 89.61 | 12500 | 0.030 | 700 | Red |
| HSC0603-1N8□-T | 1.8/250 | J,K | 16/250 | 1.77 | 46.55 | 1.77 | 59.72 | 12500 | 0.045 | 700 | Black |
| HSC0603-2N2□-T | 2.2/250 | J,K | 13/250 | 2.14 | 26.03 | 2.13 | 34.11 | 12500 | 0.250 | 700 | Yellow |
| HSC0603-3N3□-T | 3.3/250 | J,K | 30/250 | 3.42 | 73.45 | 3.46 | 95.36 | 5900 | 0.045 | 700 | Blue |
| HSC0603-3N6□-T | 3.6/250 | J,K | 22/250 | 3.68 | 64.2 | 3.73 | 82.77 | 5900 | 0.063 | 700 | Red |
| HSC0603-3N9□-T | 3.9/250 | J,K | 22/250 | 3.90 | 50.11 | 3.94 | 67.32 | 6900 | 0.080 | 700 | Brown |
| HSC0603-4N3□-T | 4.3/250 | J,K | 22/250 | 4.44 | 67.5 | 4.59 | 81.57 | 5900 | 0.063 | 700 | Orange |
| HSC0603-4N7□-T | 4.7/250 | J,K | 20/250 | 4.65 | 58.79 | 4.75 | 75.36 | 5800 | 0.085 | 700 | Violet |
| HSC0603-5N1□-T | 5.1/250 | J,K | 20/250 | 5.07 | 54.5 | 5.21 | 70.06 | 5700 | 0.115 | 700 | Green |
| HSC0603-5N6□-T | 5.6/250 | J,K | 20/250 | 5.48 | 43.67 | 5.66 | 55.16 | 5800 | 0.160 | 700 | Black |
| HSC0603-6N3□-T | 6.3/250 | J,K | 26/250 | 6.54 | 68.68 | 6.71 | 88.51 | 5700 | 0.115 | 700 | White |
| HSC0603-6N8□-T | 6.8/250 | J,K | 27/250 | 6.89 | 62.87 | 7.08 | 82.33 | 5800 | 0.125 | 700 | Red |
| HSC0603-7N5□-T | 7.5/250 | J,K | 28/250 | 7.57 | 65.18 | 7.84 | 85.57 | 4800 | 0.115 | 700 | Brown |
| HSC0603-8N2□-T | 8.2/250 | J,K | 30/250 | 8.13 | 65.01 | 8.47 | 82.23 | 4700 | 0.125 | 700 | Orange |
| HSC0603-8N7□-T | 8.7/250 | J,K | 28/250 | 8.76 | 63.94 | 9.22 | 76.37 | 4600 | 0.109 | 700 | Yellow |
| HSC0603-9N1□-T | 9.1/250 | J,K | 28/250 | 9.21 | 62.29 | 9.77 | 75.88 | 4600 | 0.120 | 700 | Black |
| HSC0603-9N5□-T | 9.5/250 | J,K | 28/250 | 9.79 | 62.25 | 10.58 | 69.16 | 5400 | 0.145 | 700 | Blue |
| HSC0603-10N□-T | 10/250 | G,J,K | 31/250 | 10.36 | 69.22 | 10.81 | 90.90 | 4800 | 0.145 | 700 | Orange |
| HSC0603-11N□-T | 11/250 | G,J,K | 30/250 | 11.22 | 67.67 | 11.80 | 85.69 | 4000 | 0.145 | 700 | Gray |
| HSC0603-12N□-T | 12/250 | G,J,K | 35/250 | 12.37 | 69.26 | 13.22 | 83.39 | 4000 | 0.140 | 700 | Yellow |
| HSC0603-15N□-T | 15/250 | G,J,K | 35/250 | 15.22 | 76.65 | 16.37 | 88.93 | 4000 | 0.180 | 700 | Green |
| HSC0603-16N□-T | 16/250 | G,J,K | 34/250 | 16.6 | 79.11 | 18.38 | 79.94 | 3300 | 0.170 | 700 | White |
| HSC0603-18N□-T | 18/250 | G,J,K | 35/250 | 18.44 | 76.19 | 20.05 | 80.07 | 3100 | 0.180 | 700 | Blue |
| HSC0603-19N□-T | 19/250 | G,J,K | 35/250 | 19.71 | 73.77 | 23.35 | 62.78 | 3000 | 0.190 | 700 | Brown |
| HSC0603-20N□-T | 20/250 | G,J,K | 38/250 | 20.5 | 79.78 | 23.27 | 86.77 | 3000 | 0.180 | 700 | Red |
| HSC0603-22N□-T | 22/250 | G,J,K | 38/250 | 22.66 | 78.78 | 25.67 | 83.99 | 3000 | 0.190 | 700 | Violet |
| HSC0603-23N□-T | 23/250 | G,J,K | 38/250 | 24.19 | 70.88 | 28.48 | 72.86 | 2850 | 0.205 | 700 | Orange |
| HSC0603-24N□-T | 24/250 | G,J,K | 36/250 | 25.74 | 70.93 | 31.01 | 63.21 | 2650 | 0.205 | 700 | Black |
| HSC0603-25N□-T | 25/250 | G,J,K | 38/250 | 25.93 | 84.76 | 29.73 | 89.52 | 2800 | 0.210 | 600 | Yellow |
| HSC0603-27N□-T | 27/250 | G,J,K | 40/250 50/250 | 29.03 | 59.83 | 37.43 | 46.06 | 2800 | 0.220 | 600 | Gray |
| HSC0603-30N□-T | 30/250 | G,J,K | 37/250 | 32.91 | 68.96 | 41.66 | 59.67 | 2250 | 0.220 | 600 | Brown |
| HSC0603-33N□-T | 33/250 | G,J,K | 40/250 | 35.72 | 61.57 | 47.39 | 50.44 | 2300 | 0.220 | 600 | White |
| HSC0603-36N□-T | 36/250 | G,J,K | 37/250 | 39.45 | 64.02 | 50.92 | 59.84 | 2080 | 0.250 | 600 | Red |
| HSC0603-39N□-T | 39/250 | G,J,K | 40/250 | 42.71 | 61.22 | 58.42 | 47.55 | 2200 | 0.260 | 600 | Black |
| HSC0603-43N□-T | 43/250 | G,J,K | 38/250 | 47.21 | 62.53 | 64.17 | 53.05 | 2000 | 0.280 | 600 | Orange |
| HSC0603-47N□-T | 47/200 | G,J,K | 38/200 | 51.82 | 52.98 | 77.03 | 39.17 | 2000 | 0.280 | 600 | Brown |
| HSC0603-51N□-T | 51/200 | G,J,K | 38/250 | 59.27 | 50.95 | 103.8 | 23.61 | 2130 | 0.300 | 600 | Violet |
| HSC0603-56N□-T | 56/200 | G,J,K | 38/200 | 64.38 | 51.47 | 108.1 | 28.82 | 1900 | 0.310 | 600 | Red |
| HSC0603-62N□-T | 62/200 | G,J,K | 37/200 | 73.3 | 42.68 | 156.5 | 16.15 | 1800 | 0.330 | 600 | Gray |
| HSC0603-68N□-T | 68/200 | G,J,K | 37/200 | 80.23 | 44.33 | 174.0 | 18.31 | 1700 | 0.340 | 600 | Orange |
| HSC0603-72N□-T | 72/150 | G,J,K | 34/150 | 86.67 | 41.11 | 212.9 | 15.59 | 1700 | 0.490 | 400 | Yellow |
| HSC0603-79N□-T | 79/150 | G,J,K | 34/150 | 87.02 | 44.18 | — | — | 1700 | 0.500 | 400 | White |
| HSC0603-82N□-T | 82/150 | G,J,K | 34/150 | 101.2 | 37.88 | 300.6 | 11.78 | 1700 | 0.540 | 400 | Green |
| HSC0603-91N□-T | 91/150 | G,J,K | 34/150 | 111.8 | 49.36 | — | — | 1500 | 0.560 | 400 | Brown |
| HSC0603-R10□-T | 100/150 | G,J,K | 34/150 | 126.9 | 36.13 | — | — | 1400 | 0.580 | 400 | Blue |
| HSC0603-R11□-T | 110/150 | G,J,K | 32/150 | 146.8 | 34.58 | — | — | 1350 | 0.610 | 300 | Violet |
| HSC0603-R12□-T | 120/150 | G,J,K | 32/150 | 166.8 | 28.57 | — | — | 1300 | 0.650 | 300 | Gray |
| HSC0603-R13□-T | 13/150 | G,J,K | 32/150 | 180.1 | 36.93 | — | — | 1200 | 0.750 | 280 | Orange |
| HSC0603-R15□-T | 150/150 | G,J,K | 28/150 | 234.9 | 21.92 | — | — | 990 | 0.920 | 280 | White |
| HSC0603-R17□-T | 170/100 | G,J,K | 25/100 | 228.4 | 34.96 | — | — | 990 | 1.150 | 240 | Yellow |
| HSC0603-R18□-T | 180/100 | G,J,K | 25/100 | 289.1 | 19.93 | — | — | 990 | 1.250 | 240 | Black |
| HSC0603-R19□-T | 190/100 | G,J,K | 25/100 | 279.1 | 30.83 | — | — | 990 | 1.350 | 200 | Green |
| HSC0603-R20□-T | 200/100 | G,J,K | 25/100 | — | — | — | — | 990 | 1.500 | 200 | Orange |
| HSC0603-R22□-T | 220/100 | G,J,K | 25/100 | — | — | — | — | 990 | 1.600 | 250 | Brown |
| HSC0603-R24□-T | 240/100 | G,J,K | 25/100 | — | — | — | — | 990 | 1.900 | 200 | Violet |
| HSC0603-R27□-T | 270/100 | G,J,K | 24/100 | — | — | — | — | 990 | 2.000 | 170 | Red |
| HSC0603-R33□-T | 330/100 | G,J,K | 25/100 | — | — | — | — | 990 | 2.750 | 100 | Blue |
| HSC0603-R34□-T | 340/100 | G,J,K | 25/100 | — | — | — | — | 990 | 2.900 | 100 | Gray |
| HSC0603-R39□-T | 390/100 | G,J,K | 25/100 | — | — | — | — | 990 | 3.150 | 100 | Yellow |
| HSC0603-R47□-T | 470/100 | G,J,K | 25/100 | — | — | — | — | 750 | 4.000 | 80 | Green |

1. When ordering, please specify tolerance and packaging codes. Ex: HSC0603-R39J-T

Tolerance : G = $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$

Packaging : Clear tape and reel { standard }.

2. L , Q : Agilent/HP E4991A+ Agilent/HP16197A

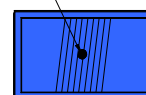
3. SRF : Agilent/HP8753D / Agilent/HP E4991A

4. Rdc : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.

5. Irms for a 15°C rise above 25°C ambient.

6. Operating temperature range from -40°C to 125°C.

1st Code



* Parts/Reel: 7" 4,000 Tape Width: 8mm

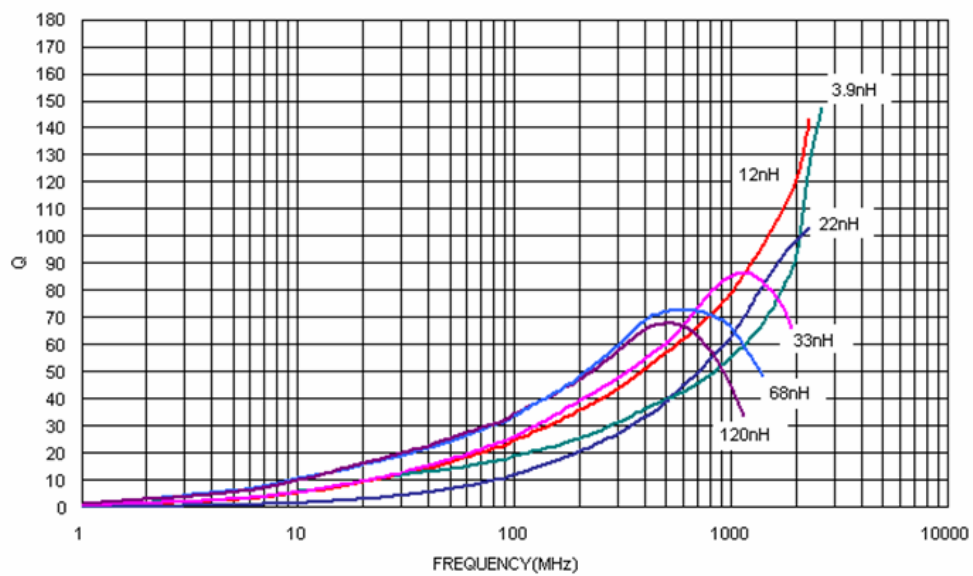
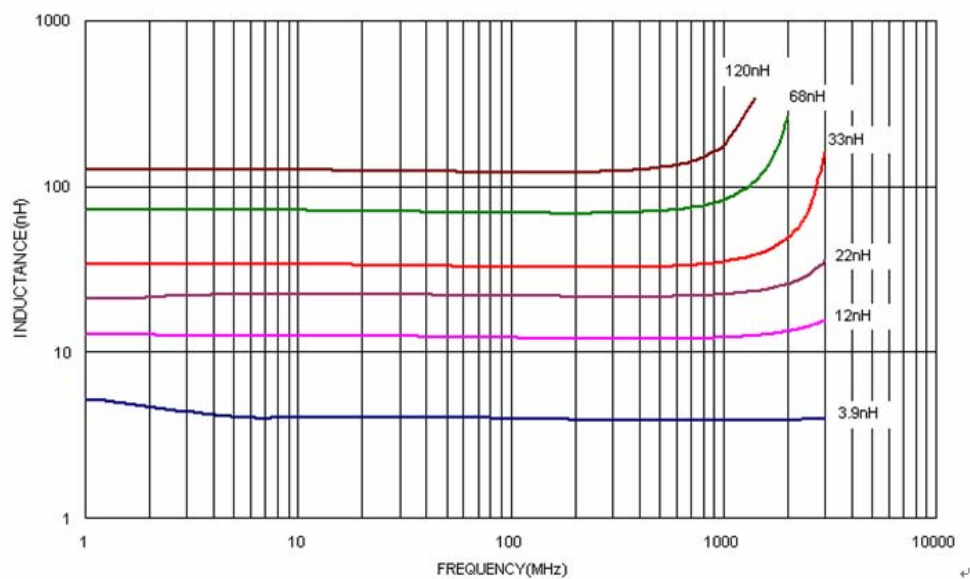
COLOR CODING

HSC0603-Series

High Frequency SMD Inductor for Signal Line

ELECTRICAL CHARACTERISTICS

Characteristics(L,Q vs. Frequency)



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

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