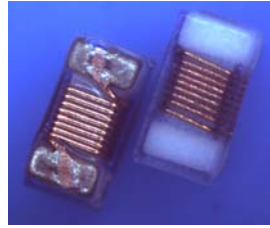

HSC0402-Series

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 0402 - 10N J - T

(1) (2) (3) (4) (5)

(1) Product name

(2) Shapes and Dimensions (LxW)

(3) Inductance

10N:10nH, 3N3:3.3nH

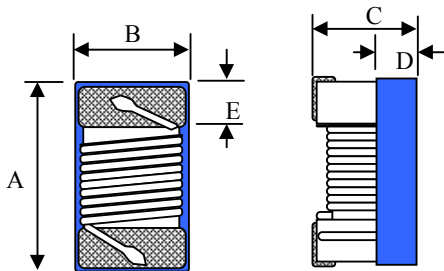
(4) Tolerance

G : ±2% ; J : ±5% ; K : ±10%

(6) Taping style

T : Taping ; None : Bulk

SHAPES AND DIMENSIONS(Unit:mm)



A : 1.27 max. mm

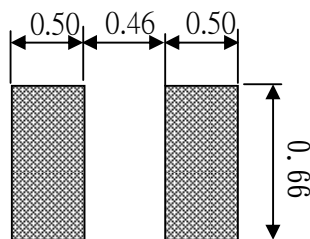
B : 0.76 max. mm

C : 0.61 max. mm

D : 0.15 Ref mm

E : 0.23 ± 0.1 mm

RECOMMENDED FOOTPRINT(Unit:mm)



HSC0402-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 (GHz) | Dc Resistance (Ω) Max. | Irms Max (mA) |
|----------------------------|------------------------|-------------------------|---------------|--------|-------|--------|-------|---------------------|---------------------------------------|------------------|
| | | | | Ltyp | Q typ | Ltyp | Q typ | | | |
| HSC0402-1N0□-T | 1.0/250 | 10 | 16/250 | 1.02 | 77 | 1.02 | 69 | 12.70 | 0.045 | 1360 |
| HSC0402-1N9□-T | 1.9/250 | 5,10 | 16/250 | 1.72 | 68 | 1.74 | 82 | 11.30 | 0.070 | 1040 |
| HSC0402-2N0□-T | 2.0/250 | 5,10 | 16/250 | 1.93 | 54 | 1.93 | 75 | 11.10 | 0.070 | 1040 |
| HSC0402-2N2□-T | 2.2/250 | 5,10 | 19/250 | 2.19 | 59 | 2.23 | 100 | 10.80 | 0.070 | 960 |
| HSC0402-2N4□-T | 2.4/250 | 5,10 | 15/250 | 2.24 | 51 | 2.27 | 68 | 10.50 | 0.070 | 790 |
| HSC0402-2N7□-T | 2.7/250 | 5,10 | 16/250 | 2.23 | 42 | 2.25 | 61 | 10.40 | 0.120 | 640 |
| HSC0402-3N3□-T | 3.3/250 | 5,10 | 19/250 | 3.10 | 65 | 3.12 | 87 | 7.00 | 0.066 | 840 |
| HSC0402-3N6□-T | 3.6/250 | 5,10 | 19/250 | 3.56 | 45 | 3.62 | 71 | 6.80 | 0.066 | 840 |
| HSC0402-3N9□-T | 3.9/250 | 5,10 | 19/250 | 3.89 | 50 | 4.00 | 75 | 5.80 | 0.066 | 840 |
| HSC0402-4N3□-T | 4.3/250 | 5,10 | 18/250 | 4.19 | 47 | 4.30 | 71 | 6.00 | 0.091 | 700 |
| HSC0402-4N7□-T | 4.7/250 | 5,10 | 15/250 | 4.55 | 48 | 4.68 | 68 | 4.70 | 0.130 | 640 |
| HSC0402-5N1□-T | 5.1/250 | 5,10 | 20/250 | 5.15 | 56 | 5.25 | 82 | 4.80 | 0.083 | 800 |
| HSC0402-5N6□-T | 5.6/250 | 5,10 | 20/250 | 5.16 | 54 | 5.28 | 81 | 4.80 | 0.083 | 760 |
| HSC0402-6N2□-T | 6.2/250 | 5,10 | 20/250 | 6.16 | 52 | 6.37 | 76 | 4.80 | 0.083 | 760 |
| HSC0402-6N8□-T | 6.8/250 | 5,10 | 20/250 | 6.56 | 63 | 6.93 | 78 | 4.80 | 0.083 | 680 |
| HSC0402-7N5□-T | 7.5/250 | 5,10 | 22/250 | 7.91 | 60 | 8.22 | 88 | 4.80 | 0.104 | 680 |
| HSC0402-8N2□-T | 8.2/250 | 5,10 | 22/250 | 8.50 | 57 | 8.85 | 84 | 4.40 | 0.104 | 680 |
| HSC0402-8N7□-T | 8.7/250 | 5,10 | 18/250 | 8.78 | 54 | 9.21 | 73 | 4.10 | 0.200 | 480 |
| HSC0402-9N0□-T | 9.0/250 | 5,10 | 22/250 | 9.07 | 62 | 9.53 | 78 | 4.16 | 0.104 | 680 |
| HSC0402-9N5□-T | 9.5/250 | 5,10 | 18/250 | 9.42 | 54 | 9.98 | 69 | 4.00 | 0.200 | 480 |
| HSC0402-10N□-T | 10/250 | 5,10 | 21/250 | 9.80 | 50 | 10.10 | 67 | 3.90 | 0.195 | 480 |
| HSC0402-11N□-T | 11/250 | 5,10 | 24/250 | 10.70 | 52 | 11.20 | 78 | 3.68 | 0.120 | 640 |
| HSC0402-12N□-T | 12/250 | 5,10 | 24/250 | 11.90 | 53 | 12.70 | 71 | 3.60 | 0.120 | 640 |
| HSC0402-13N□-T | 13/250 | 5,10 | 24/250 | 13.40 | 51 | 14.60 | 57 | 3.45 | 0.210 | 440 |
| HSC0402-15N□-T | 15/250 | 5,10 | 24/250 | 14.60 | 55 | 15.50 | 77 | 3.28 | 0.172 | 560 |
| HSC0402-16N□-T | 16/250 | 5,10 | 24/250 | 16.60 | 46 | 18.80 | 47 | 3.10 | 0.220 | 560 |
| HSC0402-18N□-T | 18/250 | 5,10 | 24/250 | 18.30 | 57 | 20.30 | 62 | 3.10 | 0.230 | 420 |
| HSC0402-19N□-T | 19/250 | 5,10 | 24/250 | 19.10 | 50 | 21.10 | 67 | 3.04 | 0.202 | 480 |
| HSC0402-20N□-T | 20/250 | 5,10 | 25/250 | 20.70 | 52 | 23.70 | 53 | 3.00 | 0.250 | 420 |
| HSC0402-22N□-T | 22/250 | 5,10 | 25/250 | 23.20 | 53 | 26.80 | 53 | 2.80 | 0.300 | 400 |

HSC0402-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 (GHz) | Dc Resistance (Ω) Max. | Irms Max (mA) |
|----------------------------|------------------------|-------------------------|---------------|--------|-------|--------|-------|---------------------|---------------------------------------|------------------|
| | | | | Ltyp | Q typ | Ltyp | Q typ | | | |
| HSC0402-23N□-T | 23/250 | 5,10 | 22/250 | 23.80 | 49 | 26.90 | 64 | 2.72 | 0.300 | 400 |
| HSC0402-24N□-T | 24/250 | 5,10 | 25/250 | 25.10 | 51 | 29.50 | 50 | 2.70 | 0.300 | 400 |
| HSC0402-27N□-T | 27/250 | 2,5,10 | 24/250 | 28.70 | 49 | 33.50 | 63 | 2.48 | 0.300 | 400 |
| HSC0402-30N□-T | 30/250 | 5,10 | 25/250 | 31.10 | 46 | 38.50 | 39 | 2.35 | 0.350 | 400 |
| HSC0402-33N□-T | 33/250 | 5,10 | 24/250 | 34.90 | 31 | 41.70 | 32 | 2.35 | 0.350 | 400 |
| HSC0402-36N□-T | 36/250 | 5,10 | 24/250 | 39.50 | 44 | 48.40 | 53 | 2.32 | 0.440 | 320 |
| HSC0402-39N□-T | 39/250 | 5,10 | 25/250 | 41.70 | 47 | 50.20 | 45 | 2.10 | 0.550 | 200 |
| HSC0402-40N□-T | 40/250 | 5,10 | 24/250 | 39.00 | 44 | 47.40 | 33 | 2.24 | 0.440 | 320 |
| HSC0402-43N□-T | 43/250 | 5,10 | 25/250 | 45.80 | 46 | 61.60 | 34 | 2.03 | 0.810 | 100 |
| HSC0402-47N□-T | 47/250 | 5,10 | 20/250 | 50.00 | 38 | 55.80 | 37 | 2.10 | 0.830 | 150 |
| HSC0402-51N□-T | 51/250 | 5,10 | 25/250 | 50.40 | 47 | 59.40 | 37 | 1.75 | 0.820 | 100 |
| HSC0402-56N□-T | 56/250 | 5,10 | 22/250 | 57.40 | 49 | 72.40 | 40 | 1.76 | 0.970 | 100 |
| HSC0402-68N□-T | 68/250 | 5,10 | 22/250 | 69.60 | 45 | 83.40 | 38 | 1.62 | 1.120 | 100 |
| HSC0402-75N□-T | 75/250 | 5 | 22/250 | - | - | - | - | 1.50 | 1.300 | 80 |
| HSC0402-R10□-T | 100/250 | 5 | 22/250 | - | - | - | - | 1.16 | 2.000 | 30 |
| HSC0402-R12□-T | 120/250 | 5,10 | 20/250 | - | - | - | - | >1.80 | 2.660 | 50 |

- When ordering, please specify tolerance and packaging codes. Ex: HSC0402-12NJ-T
Tolerance : G : $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$
Packaging : Clear tape and reel { standard }.
- L , Q : HP 4291B
- SRF : HP 8753D
- Rdc : DIGITAL MILLIOHM METER Chroma 16502, or equivalent.
- Irms for a 15°C rise above 25°C ambient.
- Operating temperature range from -40°C to 125°C.
- Packaging quantity: 4000 pcs/reel

HSC0402-Series

High Frequency SMD Inductor for Signal Line

ELECTRICAL CHARACTERISTICS

Characteristics(L,Q vs. Frequency)

