

**NEW!**

Ferrite Chip Inductors - 0805AF (2012)

- Higher inductance values than ceramic 0805 inductors
- Inductance values from 0.11 μ H to 22 μ H
- Heavier gauge wire for low DCR
- Ferrite construction for high current handling

| Part number ¹ | Inductance ² $\pm 5\%$ (μ H) | Q typ ³ | Impedance typ (Ohms) | SRF typ ⁴ (MHz) | DCR max ⁵ (Ohms) | Irms ⁶ (mA) | Color code |
|--------------------------|---|--------------------|-------------------------|-------------------------------|--------------------------------|---------------------------|---------------|
| 0805AF-111XJR_ | 0.11 @ 7.9 MHz | 18 @ 7.9 MHz | 370 @ 500 MHz | 1260 | 0.05 | 940 | Brown |
| 0805AF-681XJR_ | 0.68 @ 7.9 MHz | 19 @ 7.9 MHz | 430 @ 100 MHz | 425 | 0.30 | 600 | Orange |
| 0805AF-102XJR_ | 1.0 @ 7.9 MHz | 17 @ 7.9 MHz | 670 @ 100 MHz | 355 | 0.39 | 650 | Yellow |
| 0805AF-122XJR_ | 1.2 @ 7.9 MHz | 19 @ 7.9 MHz | 860 @ 100 MHz | 375 | 0.64 | 440 | Brown |
| 0805AF-152XJR_ | 1.5 @ 7.9 MHz | 20 @ 7.9 MHz | 1000 @ 100 MHz | 285 | 0.74 | 390 | Green |
| 0805AF-182XJR_ | 1.8 @ 7.9 MHz | 20 @ 7.9 MHz | 1360 @ 100 MHz | 300 | 0.98 | 370 | Blue |
| 0805AF-222XJR_ | 2.2 @ 7.9 MHz | 19 @ 7.9 MHz | 840 @ 50 MHz | 105 | 0.98 | 350 | Brown |
| 0805AF-272XJR_ | 2.7 @ 7.9 MHz | 19 @ 7.9 MHz | 1050 @ 50 MHz | 100 | 1.16 | 320 | Violet |
| 0805AF-332XJR_ | 3.3 @ 7.9 MHz | 19 @ 7.9 MHz | 1670 @ 50 MHz | 85 | 1.20 | 330 | Gray |
| 0805AF-472XJR_ | 4.7 @ 7.9 MHz | 18 @ 7.9 MHz | 950 @ 25 MHz | 55 | 1.50 | 280 | Black |
| 0805AF-682XJR_ | 6.8 @ 7.9 MHz | 18 @ 7.9 MHz | 450 @ 10 MHz | 37 | 1.90 | 240 | Brown |
| 0805AF-103XJR_ | 10 @ 2.5 MHz | 18 @ 2.5 MHz | 740 @ 10 MHz | 26 | 2.20 | 230 | Red |
| 0805AF-153XJR_ | 15 @ 2.5 MHz | 17 @ 2.5 MHz | 1300 @ 10 MHz | 20 | 4.25 | 150 | Yellow |
| 0805AF-223XJR_ | 22 @ 2.5 MHz | 17 @ 2.5 MHz | 1620 @ 10 MHz | 21 | 6.70 | 120 | Green |

1. When ordering, please specify **termination** and **packaging** codes:

0805AF-103XJR_C

Termination: **R** = RoHS compliant matte tin over nickel over silver-platinum-glass frit.

Special order: **Q** = RoHS tin-silver-copper (95.5/4/0.5) or **P** = non-RoHS tin-lead (63/37).

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 parts per full reel).

B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

- Inductance measured at 0.1 Vrms, using Coilcraft SMD-A fixture in Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.
- Q measured on Agilent/HP 4395A with Agilent/HP 16193 test fixture.
- SRF measured using Agilent/HP 8753D network analyzer with Coilcraft SMD-D test fixture.
- DCR measured on Cambridge Technology Micro-ohmmeter.
- Current that causes a 15°C temperature rise from 25°C ambient. Because of their open construction, these parts will not saturate.
- Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Designer's Kit C450 contains 10 of each value

Core material Ferrite

Environmental RoHS compliant without exemption, halogen free

Terminations RoHS compliant matte tin over nickel over silver-platinum-glass frit. Other terminations available at additional cost.

Weight 16.7– 18.0 mg

Ambient temperature -40°C to +85°C with Irms current, +85°C to +100°C with derated current

Storage temperature Component: -40°C to +100°C.

Packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

One per billion hours / one billion hours, calculated per Telcordia SR-332

Packaging 2000/7" reel; Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.65 mm pocket depth

PCB washing Only pure water or alcohol recommended



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Document 781-1 Revised 01/18/12

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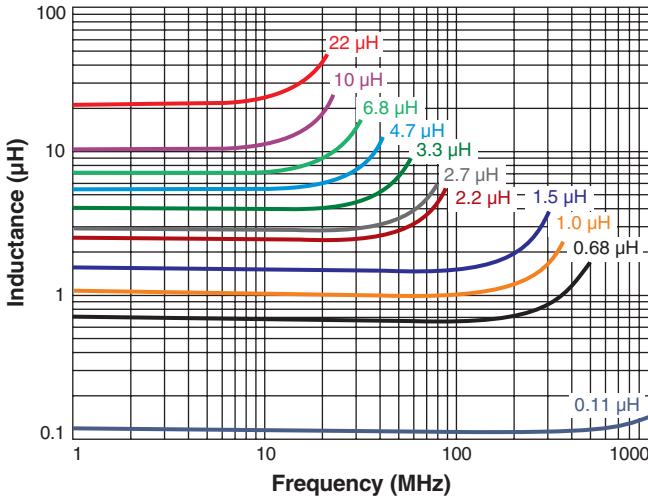
This product may not be used in medical of high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check out web site for latest information.



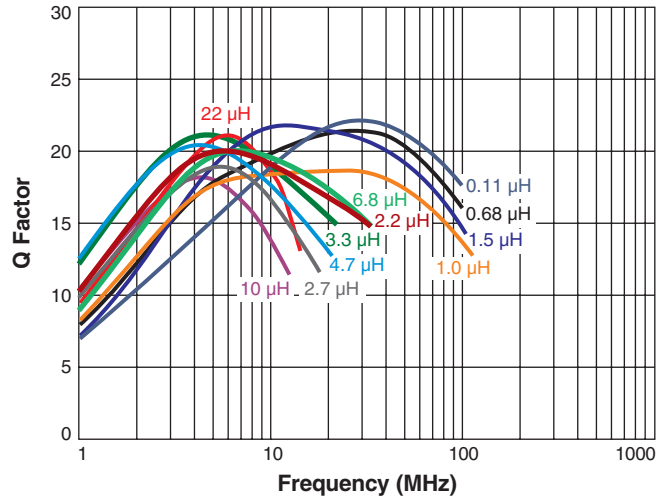
NEW!

Ferrite Chip Inductors – 0805AF Series

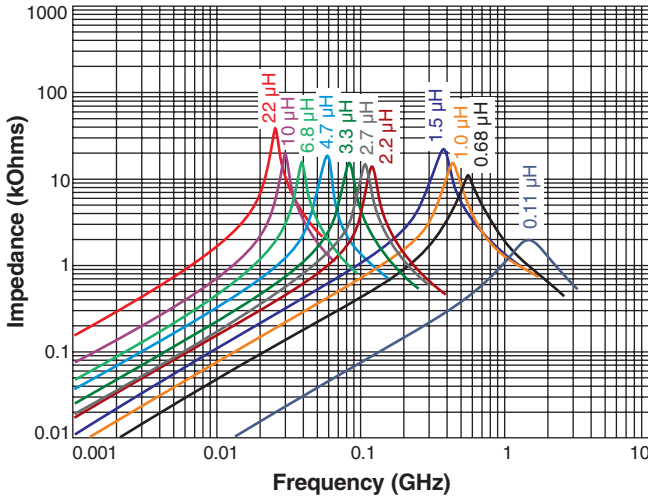
Typical L vs Frequency



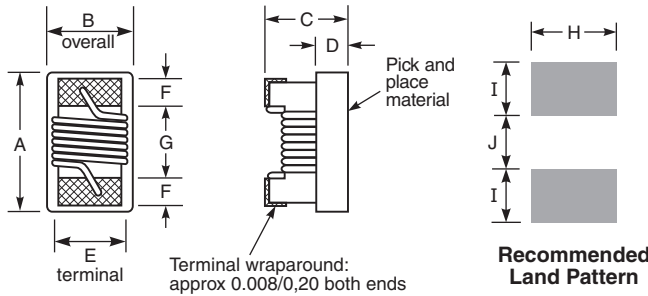
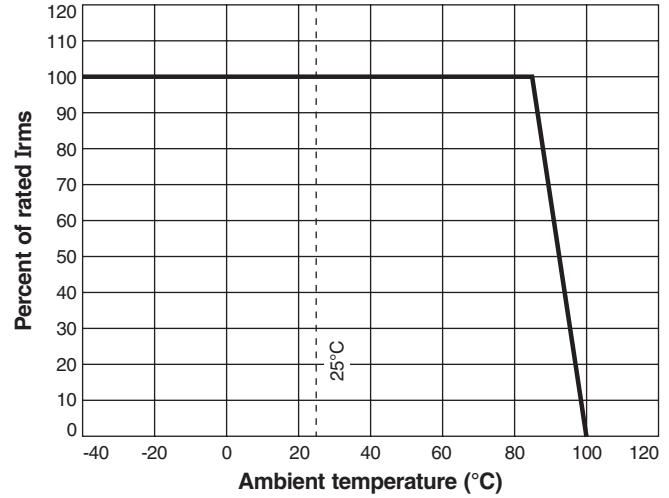
Typical Q vs Frequency



Typical Impedance vs Frequency



Irms Derating



| A | B | C | D | E | F | G | H | I | J |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| max | max | max | ref | | | | | | |
| 0.090 | 0.068 | 0.060 | 0.020 | 0.050 | 0.016 | 0.040 | 0.070 | 0.040 | 0.030 |
| 2,29 | 1,73 | 1,52 | 0,51 | 1,27 | 0,41 | 1,02 | 1,78 | 1,02 | 0,76 |

Note: Height dimension (C) is before optional solder application. For maximum height dimension including solder, add 0.006 in / 0,152 mm.



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Document 781-2 Revised 12/27/10
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