









Ferrite Chip Inductors - 0805AF (2012)



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

| Part number ¹ | Inductance ² ±5% (µH) | Qtyp ³ | Impedance typ (Ohms) | SRF typ ⁴ (MHz) | DCR max ⁵ (Ohms) | Irms ⁶ (mA) | Color code ⁷ |
|--------------------------|-------------------------------------|-------------------|-------------------------|-------------------------------|-----------------------------|---------------------------|-------------------------|
| 0805AF-111XJR_ | 0.11 @ 7.9 MHz | 18 @ 7.9 MHz | 370 @ 500MHz | 1260 | 0.05 | 940 | Brown |
| 0805AF-681XJR_ | 0.68 @ 7.9 MHz | 19 @ 7.9 MHz | 430 @ 100 MHz | 425 | 0.30 | 660 | 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 @ 50MHz | 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 @ 10MHz | 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 @ 10MHz | 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-103XJRC

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

Special order: $\mathbf{Q} = \text{RoHS tin-silver-copper}$ (95.5/4/0.5) or $\mathbf{P} = \text{non-RoHS tin-lead}$ (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.
- 3. 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.
- 5. DCR measured on Cambridge Technology Micro-ohmmeter.
- Current that causes a 15°C temperature rise from 25°C ambient. This
 information is for reference only and does not represent absolute
 maximum ratings. Click for temperature derating information.
- Each part is marked with a single dot. The color dots are not unique identifiers and correspond to multiple inductance values.
- 8. 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

Maximum part temperature +100°C (ambient + temp rise). Derating.

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

Tape and reel 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

One per billion flours / one billion flours, calculated per felcordia 3n-33/

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

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

S-Parameter files ON OUR WEB SITE SPICE models ON OUR WEB SITE



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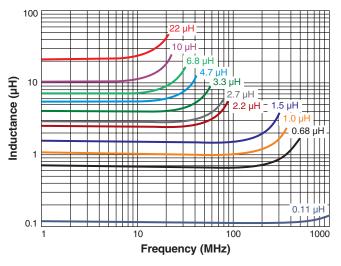
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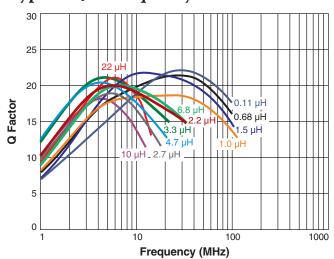


Ferrite Chip Inductors – 0805AF Series

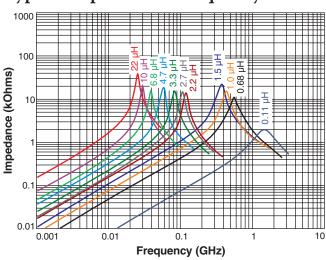
Typical L vs Frequency

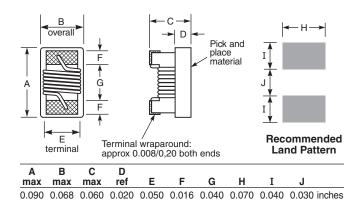


Typical Q vs Frequency



Typical Impedance vs Frequency





0,41 Note: Height dimension (C) is before optional solder application. For maximum height dimension including solder, add 0.006 in / 0,152 mm.

1,02

1,78

0,76 mm

