Ferrite Chip Inductors - 0805AF (2012)

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

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance ±5% (µH)</th>
<th>Q typ</th>
<th>Impedance typ (Ohms)</th>
<th>SRF typ (MHz)</th>
<th>DCR max (Ohms)</th>
<th>Irms (mA)</th>
<th>Color code</th>
</tr>
</thead>
<tbody>
<tr>
<td>0805AF-111XJR_</td>
<td>0.11 @ 7.9 MHz</td>
<td>18 @ 7.9 MHz</td>
<td>370 @ 500MHz</td>
<td>1260</td>
<td>0.05</td>
<td>940</td>
<td>Brown</td>
</tr>
<tr>
<td>0805AF-681XJR_</td>
<td>0.68 @ 7.9 MHz</td>
<td>19 @ 7.9 MHz</td>
<td>430 @ 100MHz</td>
<td>425</td>
<td>0.30</td>
<td>660</td>
<td>Orange</td>
</tr>
<tr>
<td>0805AF-102XJR_</td>
<td>1.0 @ 7.9 MHz</td>
<td>17 @ 7.9 MHz</td>
<td>670 @ 100MHz</td>
<td>355</td>
<td>0.39</td>
<td>650</td>
<td>Yellow</td>
</tr>
<tr>
<td>0805AF-122XJR_</td>
<td>1.2 @ 7.9 MHz</td>
<td>19 @ 7.9 MHz</td>
<td>860 @ 100MHz</td>
<td>375</td>
<td>0.64</td>
<td>440</td>
<td>Brown</td>
</tr>
<tr>
<td>0805AF-152XJR_</td>
<td>1.5 @ 7.9 MHz</td>
<td>20 @ 7.9 MHz</td>
<td>1000 @ 100MHz</td>
<td>285</td>
<td>0.74</td>
<td>390</td>
<td>Green</td>
</tr>
<tr>
<td>0805AF-182XJR_</td>
<td>1.8 @ 7.9 MHz</td>
<td>20 @ 7.9 MHz</td>
<td>1360 @ 100MHz</td>
<td>300</td>
<td>0.98</td>
<td>370</td>
<td>Blue</td>
</tr>
<tr>
<td>0805AF-222XJR_</td>
<td>2.2 @ 7.9 MHz</td>
<td>19 @ 7.9 MHz</td>
<td>840 @ 50MHz</td>
<td>105</td>
<td>0.98</td>
<td>350</td>
<td>Brown</td>
</tr>
<tr>
<td>0805AF-272XJR_</td>
<td>2.7 @ 7.9 MHz</td>
<td>19 @ 7.9 MHz</td>
<td>1050 @ 50MHz</td>
<td>100</td>
<td>1.16</td>
<td>320</td>
<td>Violet</td>
</tr>
<tr>
<td>0805AF-332XJR_</td>
<td>3.3 @ 7.9 MHz</td>
<td>19 @ 7.9 MHz</td>
<td>1670 @ 50MHz</td>
<td>85</td>
<td>1.20</td>
<td>330</td>
<td>Gray</td>
</tr>
<tr>
<td>0805AF-472XJR_</td>
<td>4.7 @ 7.9 MHz</td>
<td>18 @ 7.9 MHz</td>
<td>950 @ 25MHz</td>
<td>55</td>
<td>1.50</td>
<td>280</td>
<td>Black</td>
</tr>
<tr>
<td>0805AF-682XJR_</td>
<td>6.8 @ 7.9 MHz</td>
<td>18 @ 7.9 MHz</td>
<td>450 @ 10MHz</td>
<td>37</td>
<td>1.90</td>
<td>240</td>
<td>Brown</td>
</tr>
<tr>
<td>0805AF-103XJR_</td>
<td>10 @ 2.5 MHz</td>
<td>18 @ 2.5 MHz</td>
<td>740 @ 10MHz</td>
<td>26</td>
<td>2.20</td>
<td>230</td>
<td>Red</td>
</tr>
<tr>
<td>0805AF-153XJR_</td>
<td>15 @ 2.5 MHz</td>
<td>17 @ 2.5 MHz</td>
<td>1300 @ 10MHz</td>
<td>20</td>
<td>4.25</td>
<td>150</td>
<td>Yellow</td>
</tr>
<tr>
<td>0805AF-223XJR_</td>
<td>22 @ 2.5 MHz</td>
<td>17 @ 2.5 MHz</td>
<td>1620 @ 10MHz</td>
<td>21</td>
<td>6.70</td>
<td>120</td>
<td>Green</td>
</tr>
</tbody>
</table>

1. When ordering, please specify termination and packaging codes:
   - **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). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
   - B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

2. 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.
4. SRF measured using Agilent/HP 8753D network analyzer with Coilcraft SMD-D test fixture.
5. DCR measured on Cambridge Technology Micro-ohmmeter.
6. 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.
7. 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.

**Designers’ Kit C450** contains 10 of each value

- **Core material:** Ferrite
- **Environmental:** RoHS compliant without exemption, halogen free
- **Terminiations:** 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).
- **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)
- **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

---

**Sample & buy**

**Support & FAQ**

**Web page**

**Tools & software**

**Coilcraft**

www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

© Coilcraft Inc. 2022

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.
Ferrite Chip Inductors – 0805AF Series

Typical L vs Frequency

Typical Q vs Frequency

Typical Impedance vs Frequency

Note: Height dimension (C) is before optional solder application. For maximum height dimension including solder, add 0.006 in / 0.152 mm.