

# Wirewound Ferrite Beads 0805AF (2012)



- Higher performance than other surface mount ferrite beads in the market
- High impedance across wide bandwidth; up to GHz band
- Extremely low DCR for high current applications
- Ferrite construction and heavy gauge wire for high current handling
- Eliminates high frequency noise in power supplies or RF signal isolation applications

Part number <sup>1</sup>	Inductance <sup>2</sup> ±5% (µH)	Impedance typ (Ohms)		SRF typ <sup>3</sup> (MHz)	DCR max <sup>4</sup> (Ohms)	I <sub>rms</sub> <sup>5</sup> (mA)	Color code <sup>6</sup>
		100 MHz	900 MHz				
0805AF-111XJR_	0.11 @ 7.9 MHz	65.61	793.1	1260	0.05	940	Brown
0805AF-681XJR_	0.68 @ 7.9 MHz	387.3	2451	425	0.30	660	Orange
0805AF-102XJR_	1.0 @ 7.9 MHz	637.6	1441	355	0.39	650	Yellow
0805AF-122XJR_	1.2 @ 7.9 MHz	772.2	1423	375	0.64	440	Brown
0805AF-152XJR_	1.5 @ 7.9 MHz	942.3	1519	285	0.74	390	Green
0805AF-182XJR_	1.8 @ 7.9 MHz	1153	1515	300	0.98	370	Blue
0805AF-222XJR_	2.2 @ 7.9 MHz	7069	674.5	105	0.98	350	Brown
0805AF-272XJR_	2.7 @ 7.9 MHz	2807	26.14	100	1.16	320	Violet
0805AF-332XJR_	3.3 @ 7.9 MHz	6180	414.9	85	1.20	330	Gray
0805AF-472XJR_	4.7 @ 7.9 MHz	1259	641.9	55	1.50	280	Black
0805AF-682XJR_	6.8 @ 7.9 MHz	1092	1010	37	1.90	240	Brown
0805AF-103XJR_	10 @ 2.5 MHz	674.6	149.1	26	2.20	230	Red
0805AF-153XJR_	15 @ 2.5 MHz	485.4	283.3	20	4.25	150	Yellow
0805AF-223XJR_	22 @ 2.5 MHz	695.7	541.6	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: **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.

2. Inductance measured at 0.1 V<sub>rms</sub>, using Coilcraft SMD-A fixture in Agilent/HP 4286A impedance analyzer with Coilcraft-provided correlation pieces.

3. SRF measured using Agilent/HP 8753D network analyzer with Coilcraft SMD-D test fixture.

4. DCR measured on Cambridge Technology Micro-ohmmeter.

5. 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.](#)

6. Each part is marked with a single dot. The color dots are not unique identifiers and correspond to multiple inductance values.

7. Electrical specifications at 25°C.

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

**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 I<sub>rms</sub> 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

**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**

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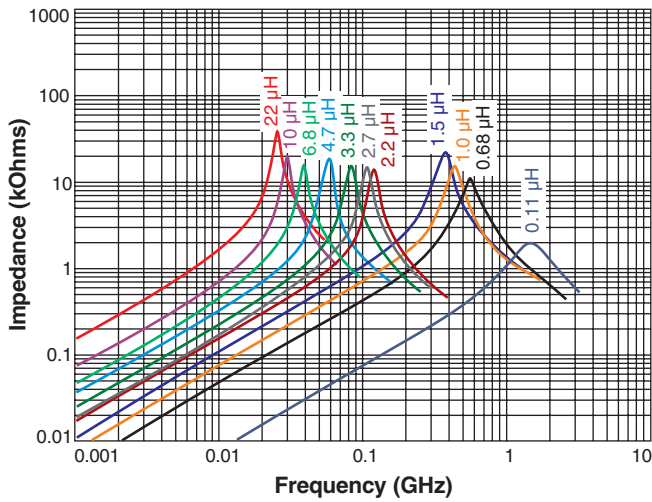
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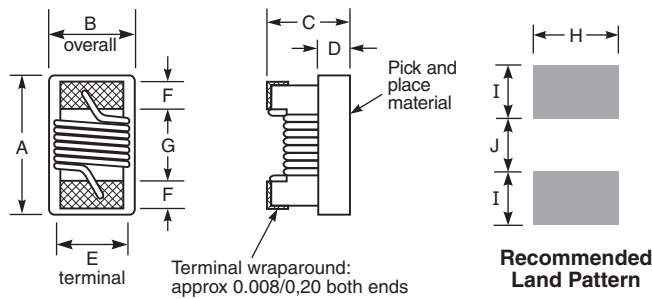
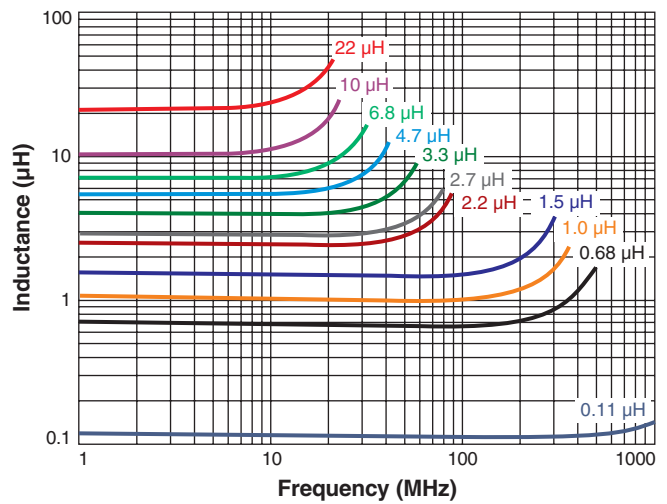


# Wirewound Ferrite Beads – 0805AF Series

## Typical Impedance vs Frequency



## Typical L vs Frequency



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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