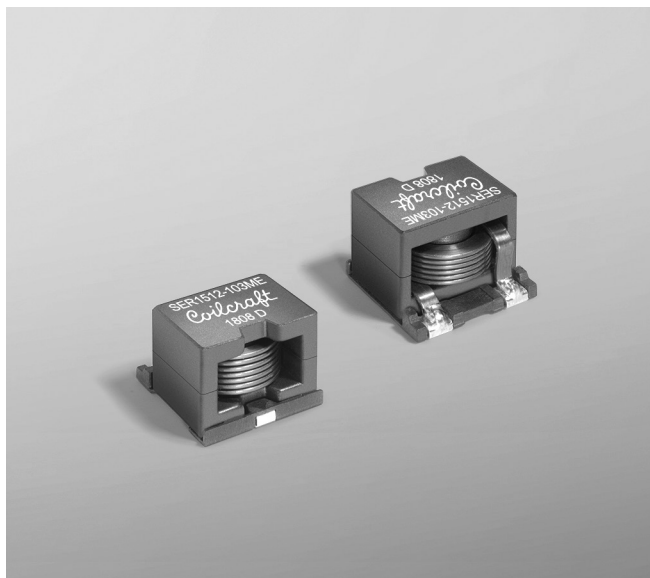


Shielded Power Inductors SER1512



- Exceptionally high current carrying capability
- Low DC resistance

Core material Ferrite

Environmental RoHS compliant, halogen free

Terminations Matte tin over nickel over phos bronze. Other terminations available at additional cost.

Weight 5.0 – 7.0 g

Ambient temperature -40°C to +85°C with (40°C rise) Irms current.

Maximum part temperature +125°C (ambient + temp rise).

Storage temperature Component: -40°C to +125°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)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 250 per 13" reel; Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 12.05 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	Inductance ² ±20% (µH)	DCR (mOhm) ³		SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
SER1512-472ME_	4.7	2.8	3.1	32.4	18.3	19.6	20.1	11.4	18.1
SER1512-103ME_	10	3.3	3.7	22.3	9.3	10.6	11.3	9.3	15.7
SER1512-223ME_	22	7.6	8.4	14.0	6.8	7.6	8.0	7.1	11.8

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

SER1512-223MED

Termination: E = RoHS compliant matte-tin over nickel over phos bronze.

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

Packaging: D = 13" machine-ready reel. EIA-481 embossed plastic tape (250 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 D instead.

2. Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A or equivalent.

3. DCR measured on a micro-ohmmeter.

4. SRF measured using an Agilent/HP 4395A network analyzer and an Agilent/HP 16193A test fixture.

5. DC current at 25°C that causes the specified inductance drop from its value without current.

6. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

7. Electrical specifications at 25°C.

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



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Document 1465-1 Revised 03/16/18

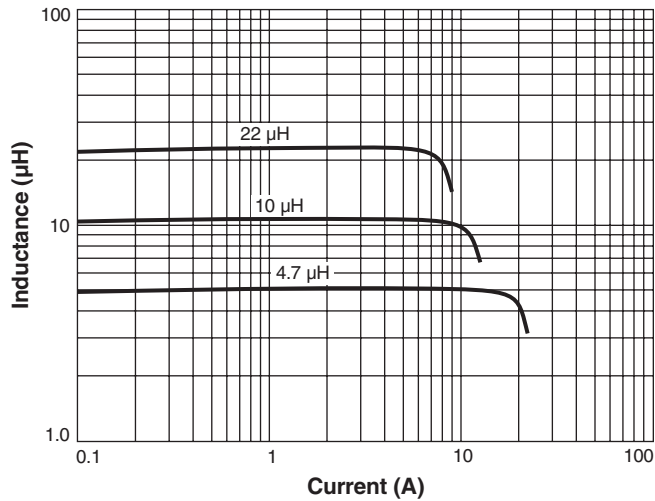
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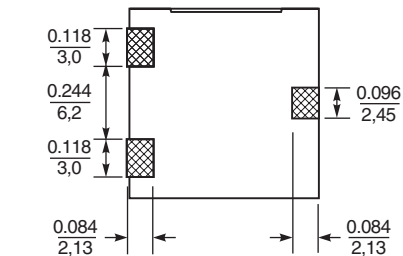
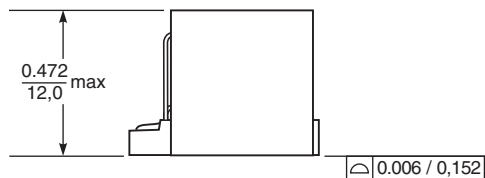
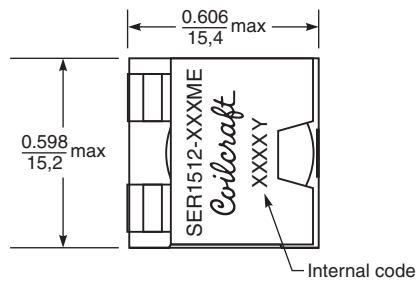
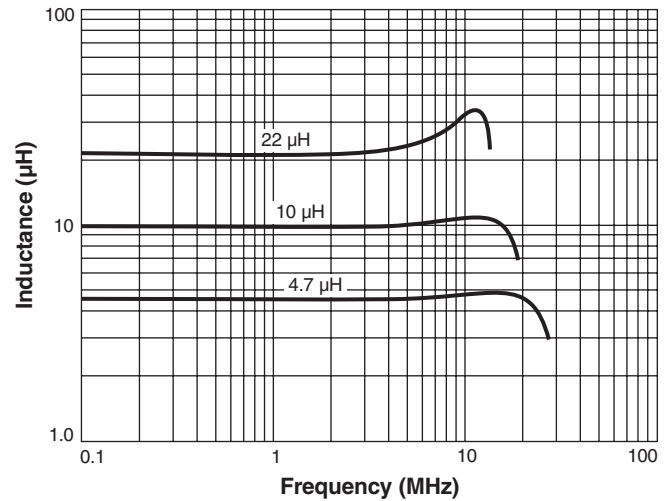


Shielded Power Inductors – SER1512 Series

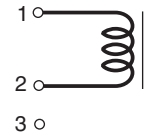
L vs Current



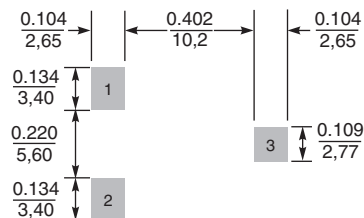
L vs Frequency



Dimensions are in
inches
mm



Terminal 3 is for
mounting stability only.



**Recommended
Land Pattern**



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