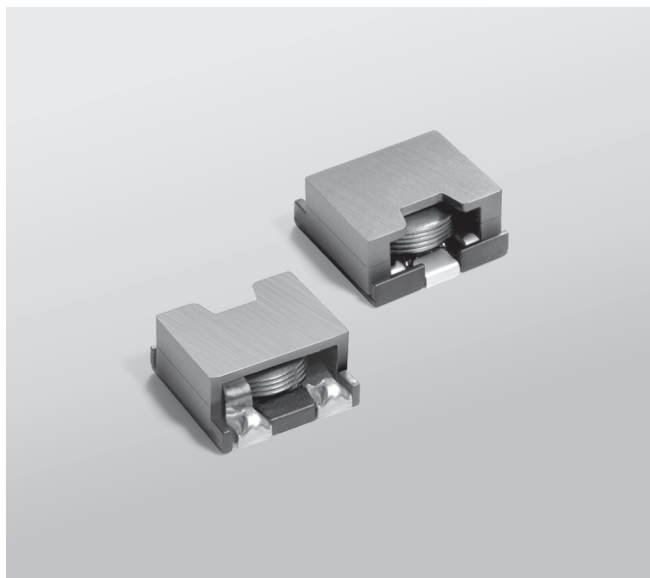




Shielded Power Inductors – SER1052



- High current, low DCR shielded power inductors
- Less than 11 × 11 mm base; only 5.2 mm tall

Designer's Kit C421 contains 3 of each value

Core and winding loss See www.coilcraft.com/coreloss

Core material Ferrite

Terminations RoHS compliant tin-silver over tin over nickel over phos bronze (pins 1 and 2); matte tin over nickel over phos bronze (pin 3). Other terminations available at additional cost.

Weight 1.6 g

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

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 200/7" reel; 700/13" reel Plastic tape: 24 mm wide, 0.4 mm thick, 16 mm pocket spacing, 5.45 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	Inductance ±20% ² (µH)	DCR max ³ (mOhm)	SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms(A) ⁶	
				10% drop	20% drop	30% drop	20°C rise	40°C rise
SER1052-801ML_	0.80	4.0	100	24.9	25.2	25.6	12.5	16.3
SER1052-102ML_	1.0	4.0	95	16.5	17.0	17.5	12.5	16.3
SER1052-122ML_	1.2	6.0	91	20.5	21.0	21.3	11.0	15.0
SER1052-132ML_	1.3	4.0	81	12.9	16.8	17.2	12.5	16.3
SER1052-152ML_	1.5	4.0	75	13.5	14.0	14.5	11.0	15.0
SER1052-182ML_	1.8	6.0	70	13.3	13.8	14.3	11.0	15.0
SER1052-202ML_	2.0	9.0	65	15.3	15.8	16.2	8.5	11.5
SER1052-222ML_	2.2	4.0	58	8.9	9.6	10.0	12.5	16.3
SER1052-252ML_	2.5	7.5	55	11.4	11.8	12.1	9.0	12.0
SER1052-322ML_	3.2	6.0	53	7.3	7.8	8.5	11.0	15.0
SER1052-402ML_	4.0	9.0	47	8.3	8.5	8.8	8.5	11.5
SER1052-432ML_	4.3	7.5	44	6.4	6.8	7.0	9.0	12.0
SER1052-572ML_	5.7	9.0	35	5.4	5.8	6.0	8.5	11.5

1. Please specify **termination** and **packaging** codes:

SER1052-572MLD

Termination: L = RoHS compliant tin-silver over copper (pins 1 and 2); matte tin over nickel over phos bronze (pin 3).

Special order:

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

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (200 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.

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (700 parts per full reel)

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 which the inductance drops the specified amount from its value without current.
6. Current that causes the specified temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.

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



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

Document 535-1 Revised 08/15/11

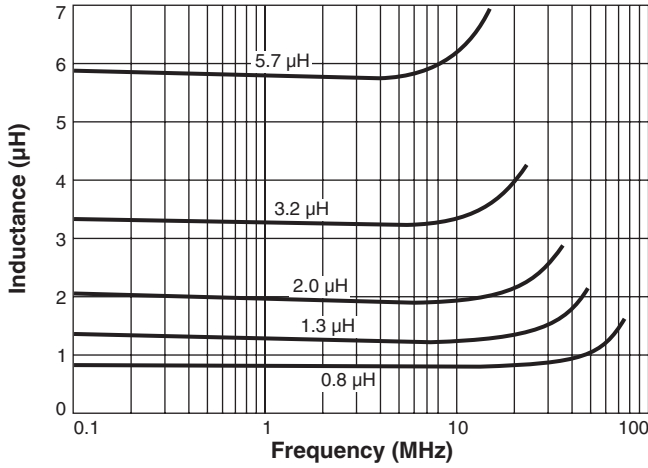
© Coilcraft Inc. 2012

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

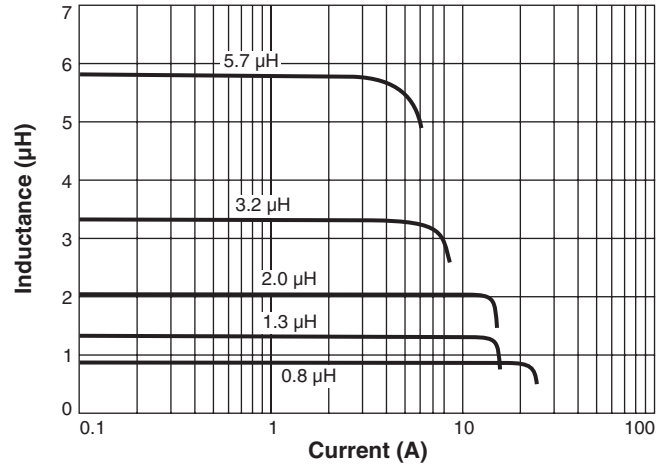


Shielded Power Inductors - SER1052 Series

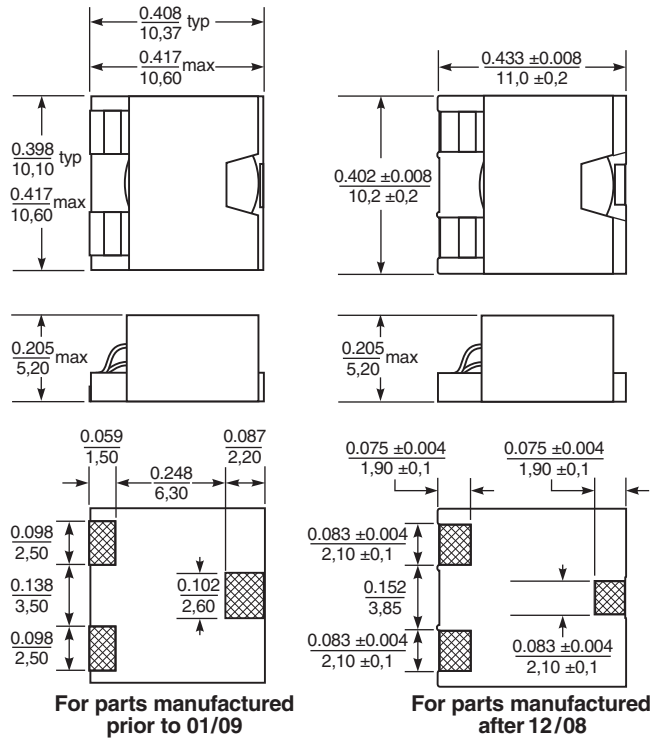
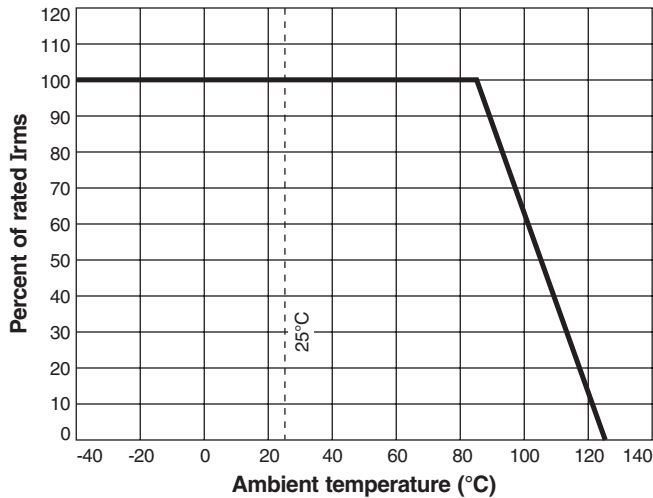
Typical L vs Frequency



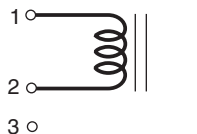
Typical L vs Current



Irms Derating



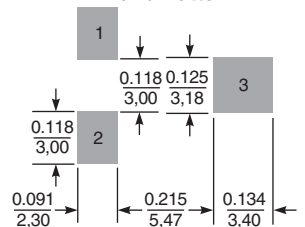
Visit <http://coilcraft.com/datecode.cfm> for an explanation of date codes.



Terminal 3 is for mounting stability only.

Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Recommended Land Pattern



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

Document 535-2 Revised 08/15/11
 © Coilcraft Inc. 2012
 This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check out web site for latest information.