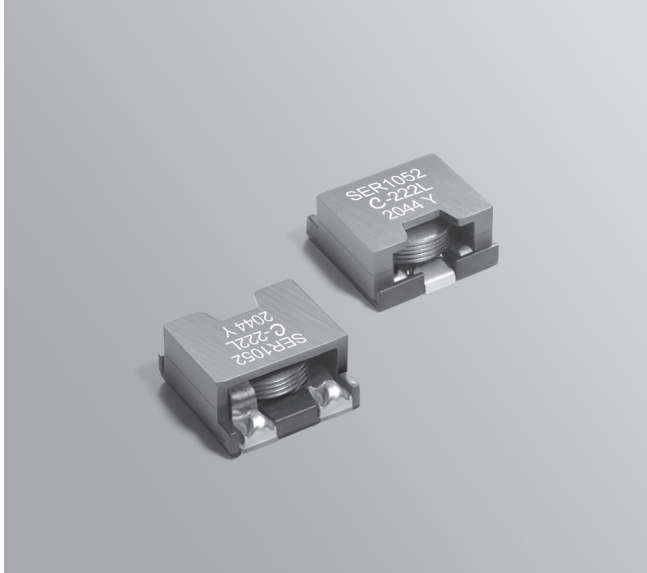


Shielded Power Inductors – SER1052



- High current, low DCR shielded power inductors
- 10.2 × 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-copper 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 (40°C rise) Irms current.

Maximum part temperature +125°C (ambient + temp rise). [Derating](#).

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)

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

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-copper over tin over nickel over phos-bronze (pins 1 and 2); matte tin over nickel over phos bronze (pin 3).

Special order:

T = RoHS tin-silver-copper over 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). 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.

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

- Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A or equivalent.
- DCR measured on a micro-ohmmeter.
- SRF measured using an Agilent/HP 4395A network analyzer and an Agilent/HP 16193A test fixture.
- DC current at 25°C that causes the specified inductance drop from its value without current.
[Click for temperature derating information.](#)
- Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.
[Click for temperature derating information.](#)
- 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 06/14/21

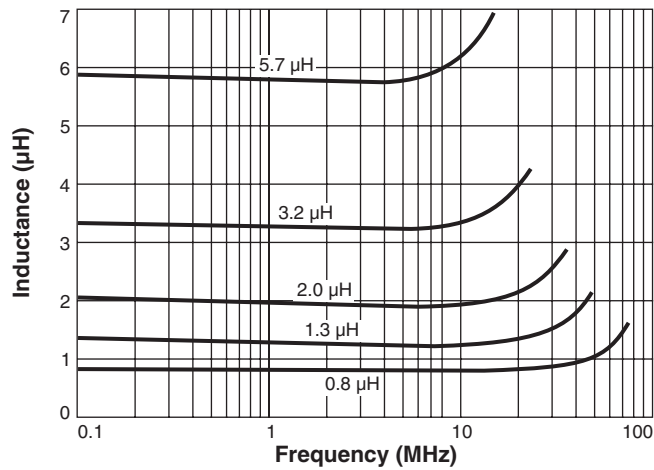
© Coilcraft Inc. 2021

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.

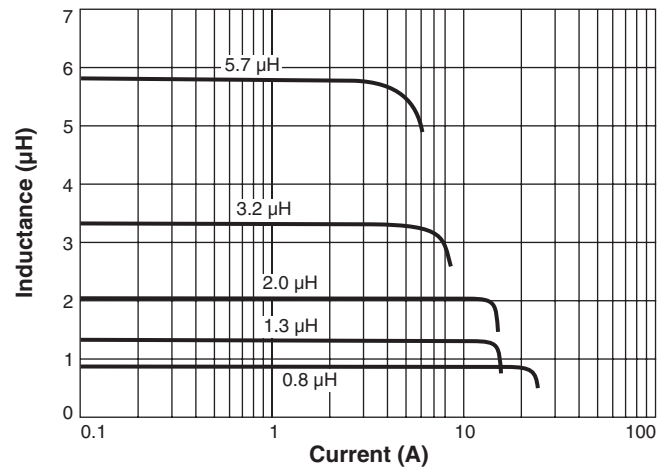


Shielded Power Inductors - SER1052 Series

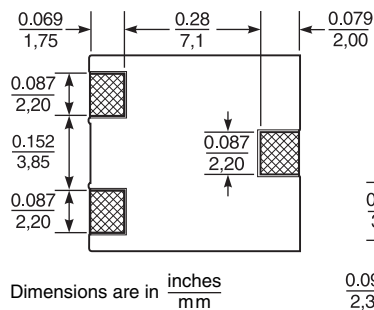
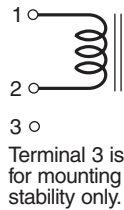
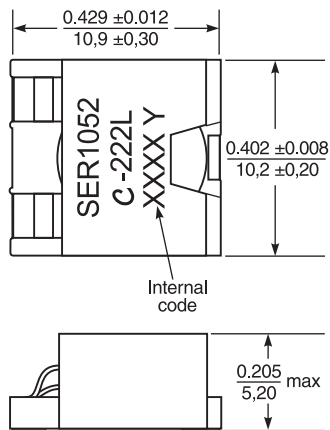
Typical L vs Frequency



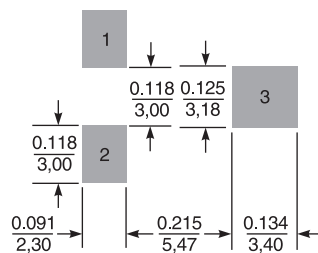
Typical L vs Current



Prior to 2012, parts may have been marked differently



Recommended Land Pattern



Dimensions are in inches
mm