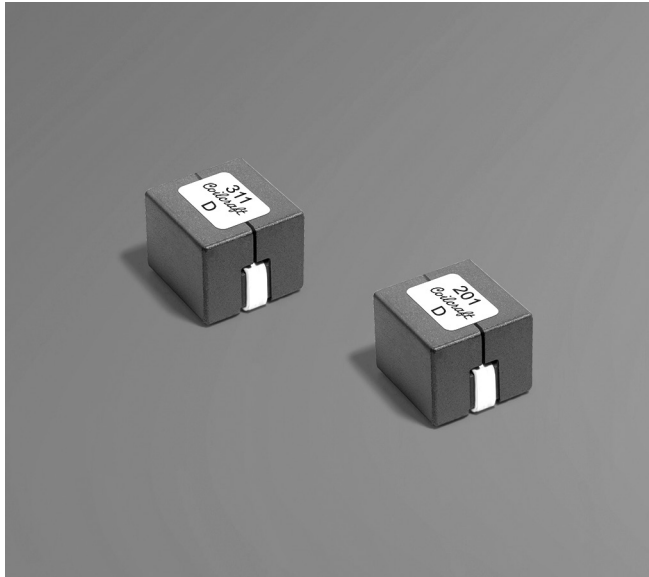


# Shielded Power Inductors – SLR1190



- Tight DCR tolerance for inductor-DCR-based current sensing circuit
- Excellent current handling
- 11.2 × 10.3 × 9.0 mm surface mount package
- Designed for use in multi-phase VRM/VRD/EVRD regulators

**Designer's Kit C467** contains 3 each of select values.

**Core material** Ferrite

**Weight** 4.1 – 4.2 g

**Environmental** RoHS compliant, halogen free

**Terminations** RoHS compliant matte tin over nickel over copper.

**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** 100/7" reel; 450/13" reel; Plastic tape: 24 mm wide, 0.5 mm thick, 12 mm pocket spacing, 8.35 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	Inductance <sup>2</sup> ±10% (nH)	IDCR ±10% <sup>3</sup> (mOhms)	SRF typ (MHz)	Isat (A) <sup>4</sup>			Irms (A) <sup>5</sup>	
				at 25°C	at 100°C	at 125°C	20°C rise	40°C rise
SLR1190-151KE_	150	0.43	95	100	87.5	82.5	58	79
SLR1190-201KE_	200	0.43	58	86	68.5	63.5	58	79
SLR1190-231KE_	230	0.43	51	72	62.0	56.5	58	79
SLR1190-251KE_	250	0.43	50	66	52.0	48.5	58	79
SLR1190-271KE_	270	0.43	49	58	50.0	45.5	58	79
SLR1190-311KE_	310	0.43	43	52	42.0	38.5	58	79
SLR1190-371KE_	370	0.43	35	41	32.5	30.5	58	79

1. When ordering, please specify **packaging** code:

**SLR1190-371KEC**

**Packaging:** **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (100 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 (450 parts per full reel).

2. Inductance at 100 kHz, 0.1 Vrms, 0 Adc.

3. DCR is measured on a micro-ohmmeter at points indicated in the diagram below.



4. DC current that causes a 20% (typ) inductance drop from its value without current. [Click for temperature derating information](#).

5. 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](#).

6. Electrical specifications at 25°C.

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

## Irms Testing

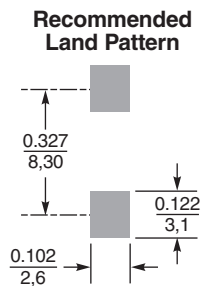
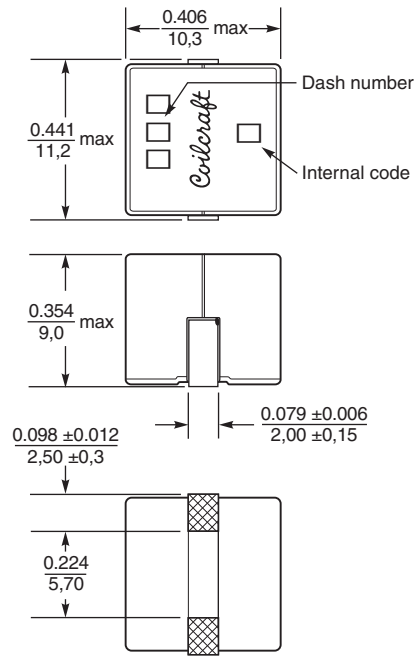
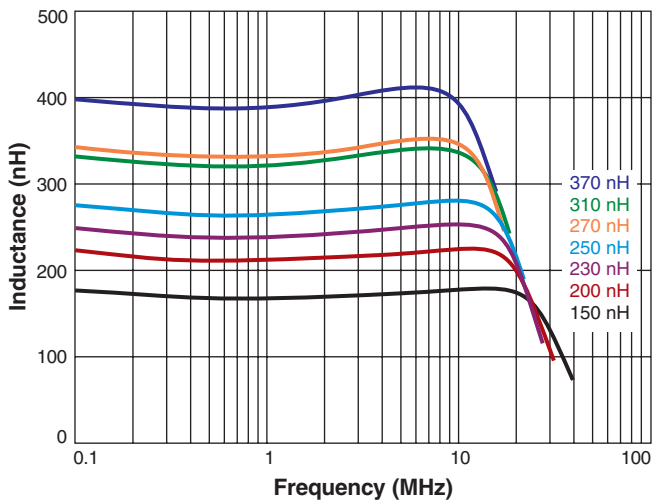
Irms testing was performed on 0.75 inch wide × 0.25 inch thick copper traces in still air.

Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.



# SLR1190 Shielded Power Inductors

## L vs Frequency



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



**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 1303-2 Revised 06/29/22

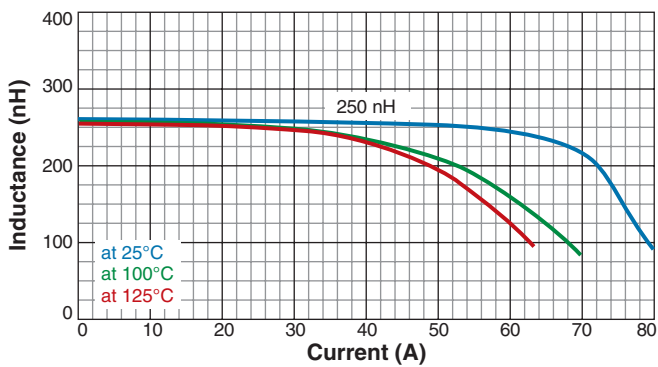
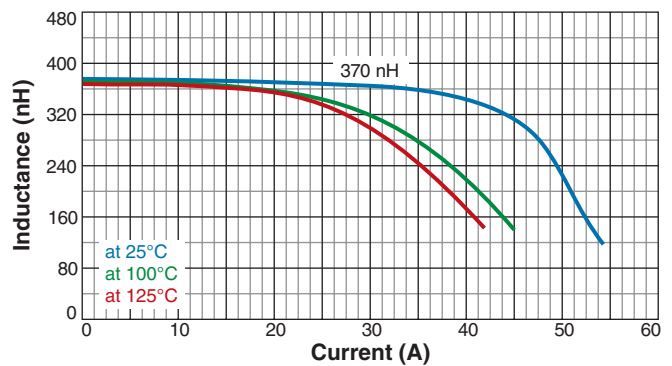
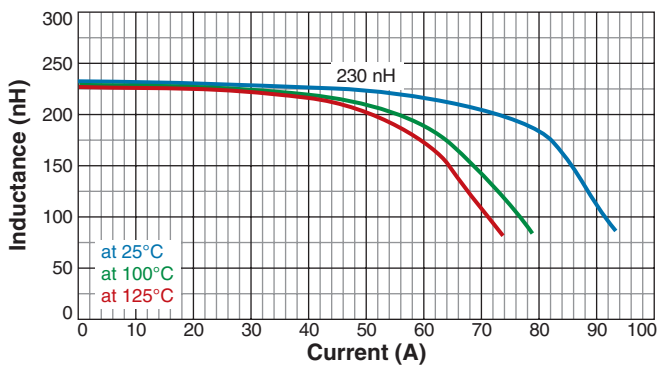
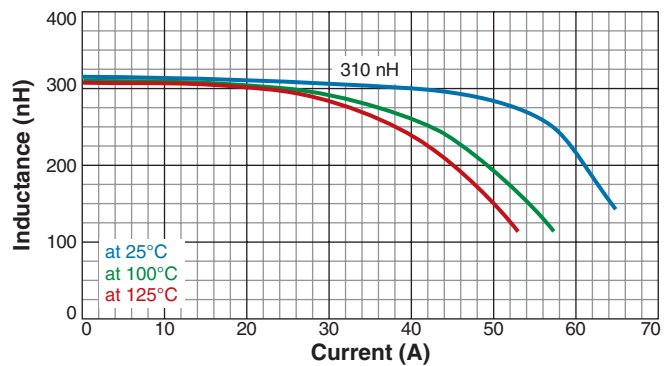
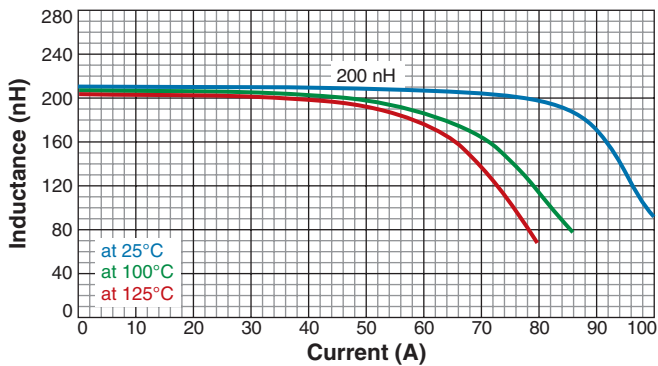
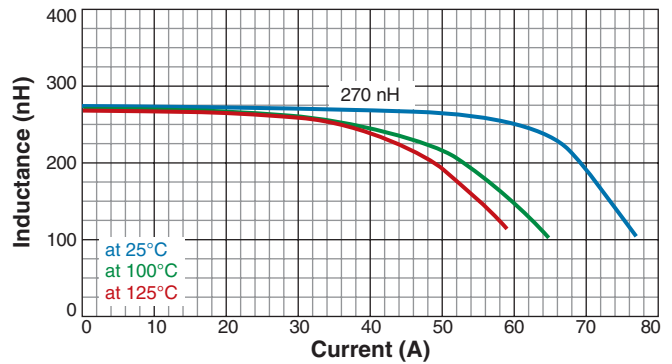
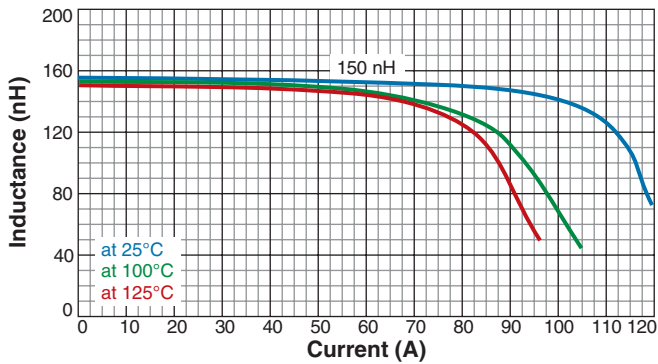
© Coilcraft Inc. 2022

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.



# SLR1190 Shielded Power Inductors

## L vs Current



**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 1303-3 Revised 06/29/22  
 © 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.