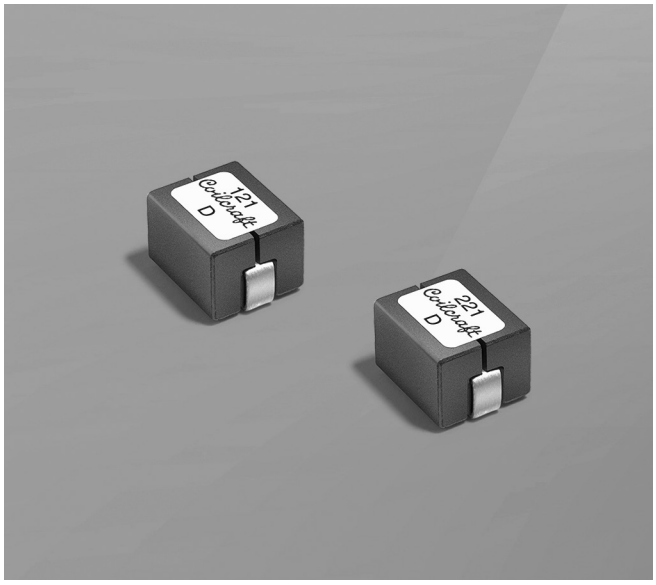
RoHS/ REACH COMPLIANT

Halogen Free

Shielded Power Inductors – SLR1075



- Tight DCR tolerance for inductor-DCR-based current sensing circuits
- Excellent current handling, up to 93 A
- 10.4 × 8.0 × 7.4 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 3.5 – 3.6 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).
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; 500/13″ reel; Plastic tape: 24 mm wide, 0.4 mm thick, 12 mm pocket spacing, 7.75 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

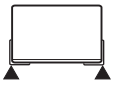
Part number[1]	Inductance[2] ±10% (nH)	DCR ±7%[3] (mOhms)	SRF typ (MHz)	Isat (A)[4] at 25°C	Isat (A)[4] at 100°C	Isat (A)[4] at 125°C	Irms (A)[5] 20°C rise	Irms (A)[5] 40°C rise
SLR1075-121KE_	120	0.29	59	93.0	78.5	72.0	50	67
SLR1075-151KE_	150	0.29	48	72.0	59.0	54.0	50	67
SLR1075-171KE_	170	0.29	44	65.0	51.5	48.0	50	67
SLR1075-221KE_	215	0.29	36	53.0	40.0	37.0	50	67
SLR1075-231KE_	230	0.29	35	49.0	36.5	33.5	50	67
SLR1075-271KE_	270	0.29	30	41.0	32.0	29.5	50	67
SLR1075-301KE_	300	0.29	27	36.0	26.5	24.0	50	67

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

SLR1075-301KEC

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 (500 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 an inductance drop of 20% (typ) from its value without current.
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.
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.

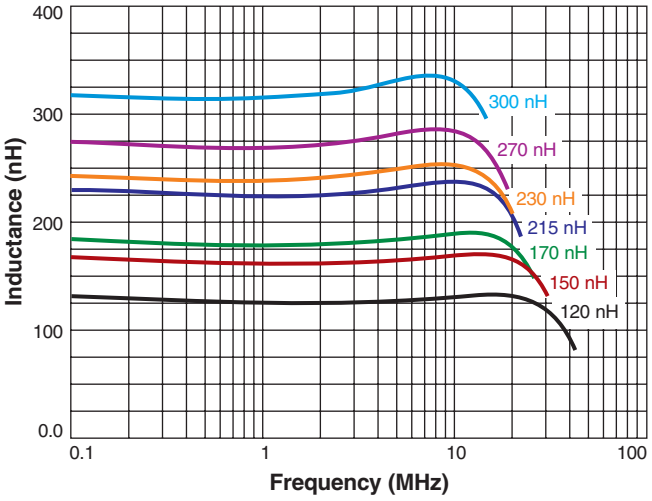
Coilcraft®
www.coilcraft.com

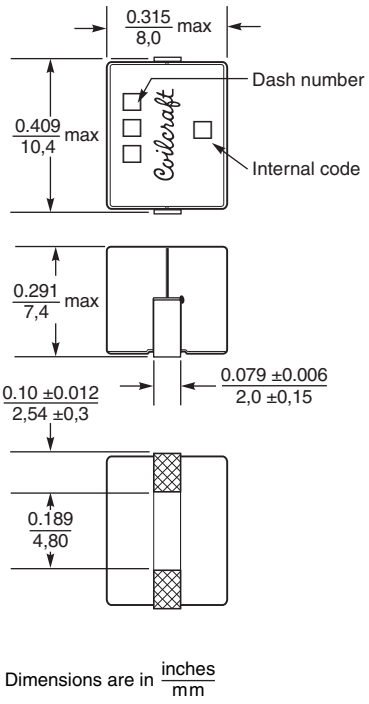
US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 1306-1 Revised 07/06/23

SLR1075 Shielded Power Inductors

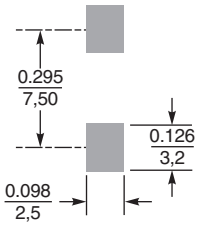
L vs Frequency





Dimensions are in inches / mm

Recommended Land Pattern



Coilcraft
www.coilcraft.com

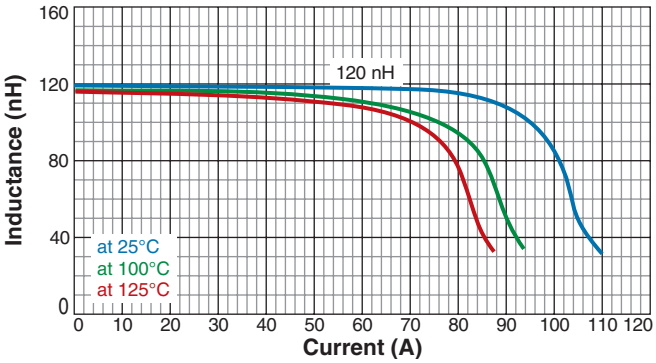
US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

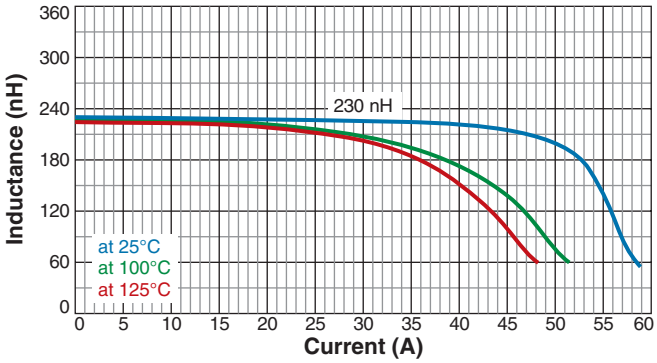
RoHS/ REACH COMPLIANT

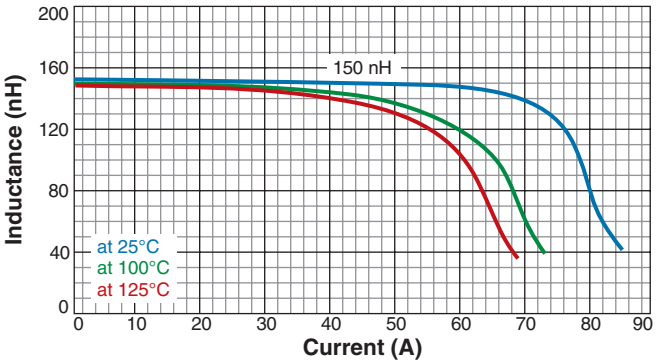
Halogen Free

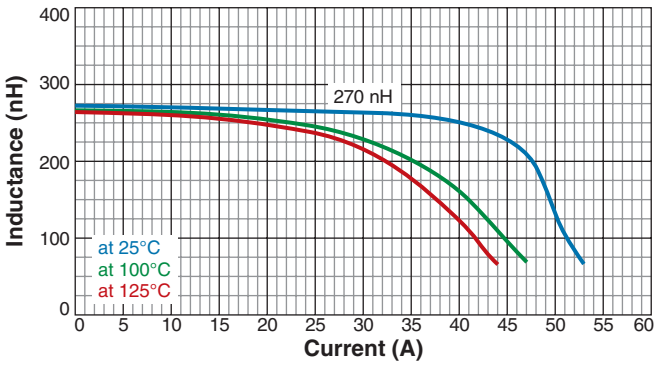
SLR1075 Shielded Power Inductors

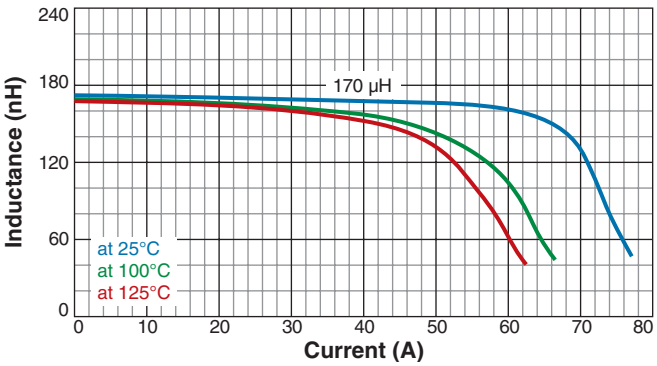
L vs Current

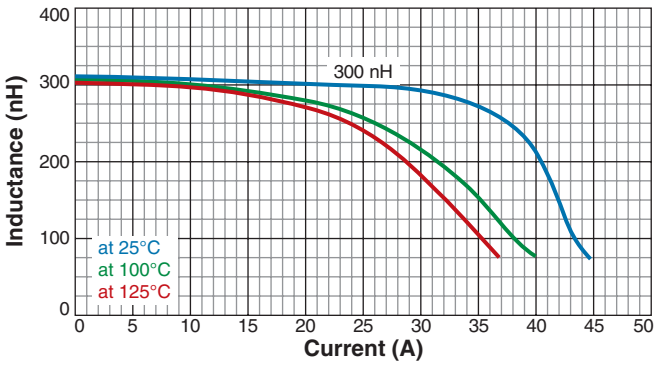


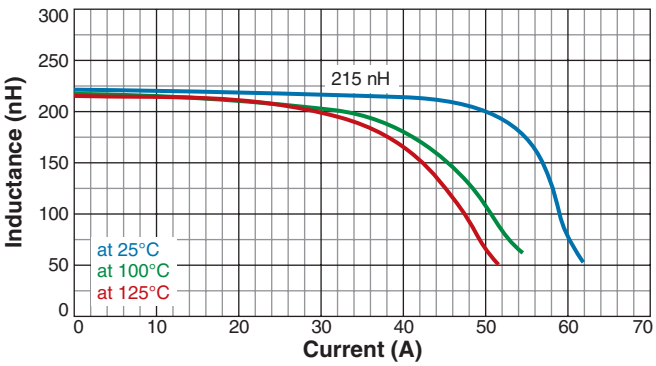












Coilcraft®
www.coilcraft.com

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 1306-3 Revised 07/06/23