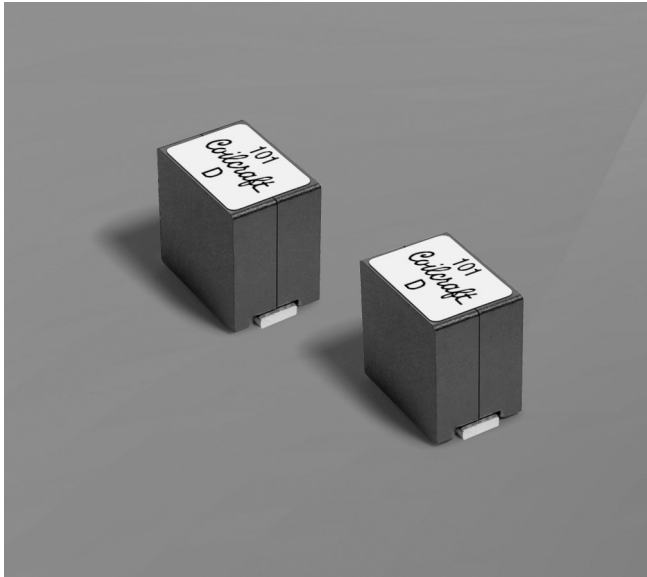


NEW!

Shielded Power Inductors – SLR7010



- Tight DCR tolerance for inductor-DCR-based current sensing circuits
- Excellent current handling
- 10 × 7 × 10 (L x W x H) mm surface mount package
- Designed for use in multi-phase VRM/VRD/EVRD regulators

Core material Ferrite

Weight 2.7 – 2.8 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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

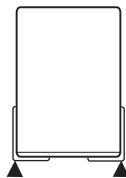
38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 400/13" reel; Plastic tape: 24 mm wide, 0.5 mm thick, 16 mm pocket spacing, 10.2 mm pocket depth. Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

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

Part number	Inductance ¹ (nH)	DCR ±10% ² (mOhms)	SRF typ (MHz)	Isat (A) ³			Irms (A) ⁴	
				at 25°C	at 100°C	at 125°C	20°C rise	40°C rise
SLR7010-101KED	100±10%	0.17	222	113	100	90	72	92
SLR7010-121KED	120±10%	0.17	159	98	84	80	72	92
SLR7010-151KED	150±10%	0.17	150	75	65	60	72	92
SLR7010-201KED	200±10%	0.17	85	62	46	42	72	92
SLR7010-251KED	250±10%	0.17	88	44	36	32	72	92
SLR7010-331LED	330±15%	0.17	50	32	26	22	72	92

1. Inductance at 100 kHz, 0.1 Vrms, 0 Adc.
2. DCR is measured on a micro-ohmmeter at points indicated in the diagram below.



3. DC current that causes an inductance drop of 20% (typ) from its value without current. [Click for temperature derating information](#).
 4. 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](#).
 5. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Irms Testing

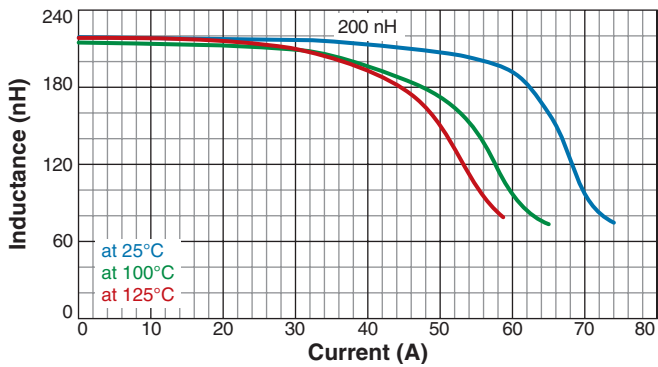
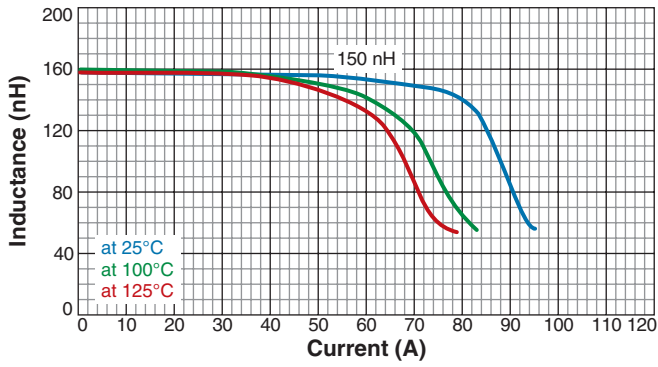
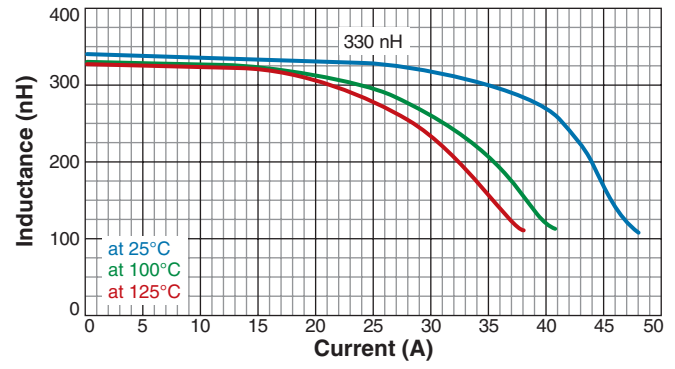
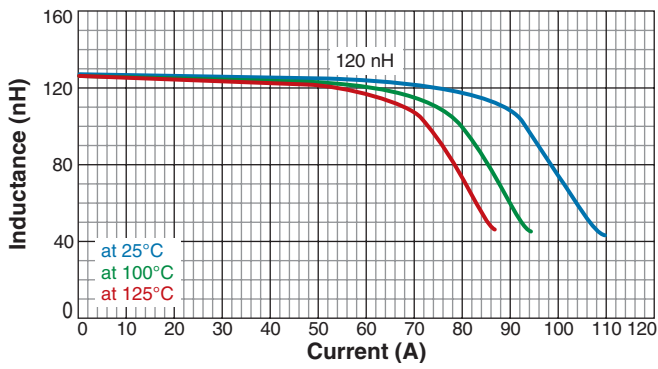
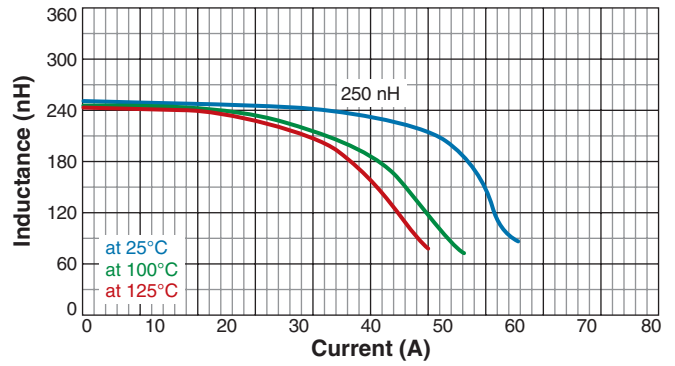
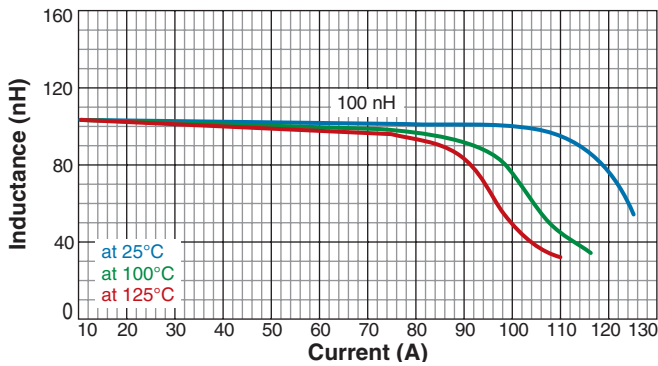
Irms testing was performed on 0.75 inch wide × 0.25 inch thick copper traces in still air.

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.



SLR7010 Shielded Power Inductors

L vs Current



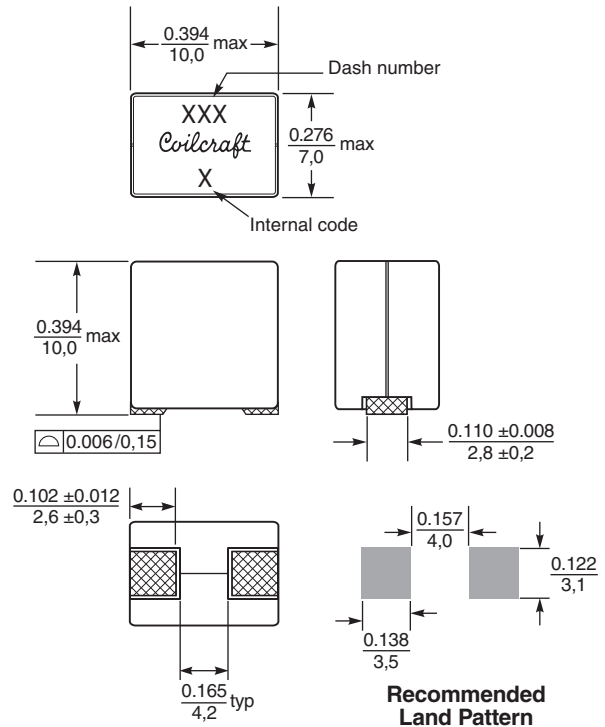
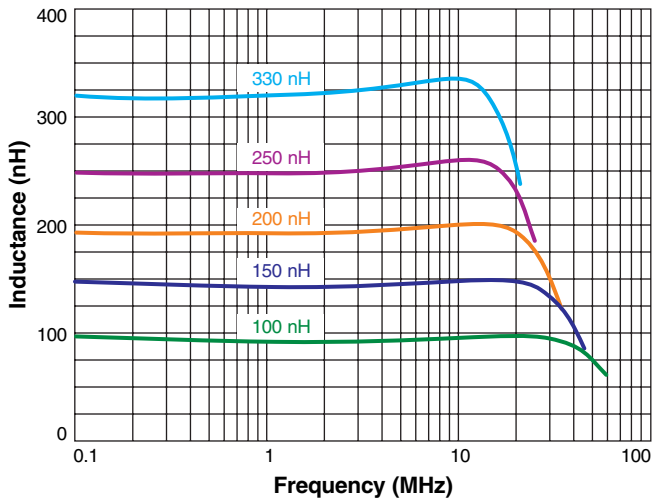
US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg

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SLR7010 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

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