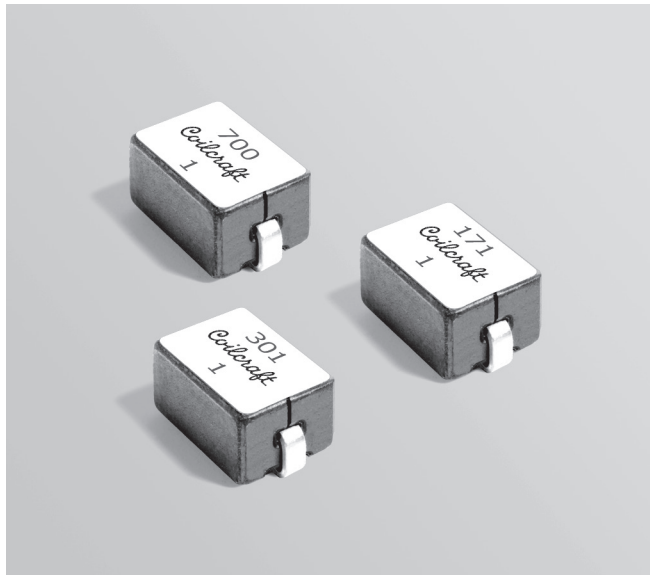


**NEW!**

Shielded Power Inductors – SLC1175



The SLC1175 is designed for high-speed switch mode applications requiring low inductance and very high saturation current ratings. While requiring a mere quarter square inch of board space, it can handle saturating current over 100 A.

This series offers several inductance values not available in other high current series.

These shielded inductors are ideal for use in multi-phase VRM/VRD regulators and high current/high frequency DC/DC converters.

Part number ¹	Inductance ² ±20% (nH)	DCR (mOhms) ³		SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
		min	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
SLC1175-700ME_	70	0.228	0.252	179	83	100	>100	25.5	35.5
SLC1175-121ME_	120	0.228	0.252	144	80	84	88	25.5	35.5
SLC1175-151ME_	150	0.228	0.252	95	64	70	76	25.5	35.5
SLC1175-171ME_	170	0.228	0.252	73	54	60	63	25.5	35.5
SLC1175-201ME_	200	0.228	0.252	64	48	53	55	25.5	35.5
SLC1175-231ME_	230	0.228	0.252	61	41	46	49	25.5	35.5
SLC1175-271ME_	270	0.228	0.252	52	32	37	40	25.5	35.5
SLC1175-301ME_	300	0.228	0.252	48	27	31	34	25.5	35.5

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

SLC1175-301MEC

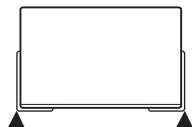
Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (150 per full reel).

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 per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4284.

3. DCR is measured between the two points indicated below.



▲ Points used for measuring DCR

4. SRF measured using an Agilent/HP 8753ES network analyzer or equivalent.

5. DC current at which the inductance drops 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.

Core material Ferrite

Environment RoHS compliant, halogen free

Terminations RoHS compliant matte tin over nickel over copper. Other terminations available at additional cost.

Weight 2.19 – 2.30 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 150/7" reel, 700/13" reel; Plastic tape: 24 mm wide, 0.4 mm thick, 12 mm pocket spacing, 7.62 mm pocket depth

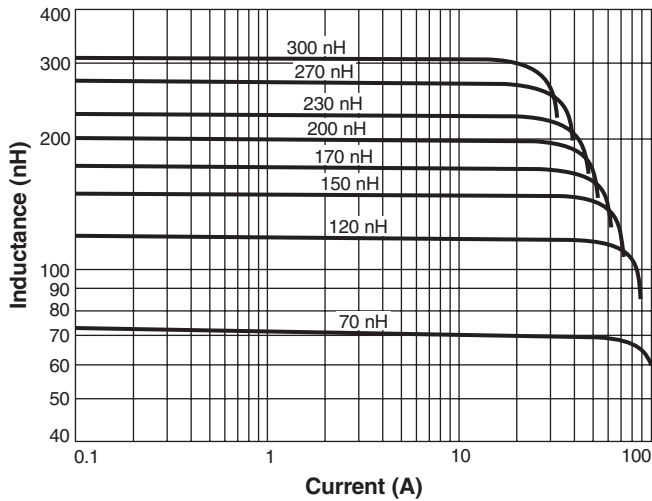
PCB washing Only pure water or alcohol recommended

NEW!

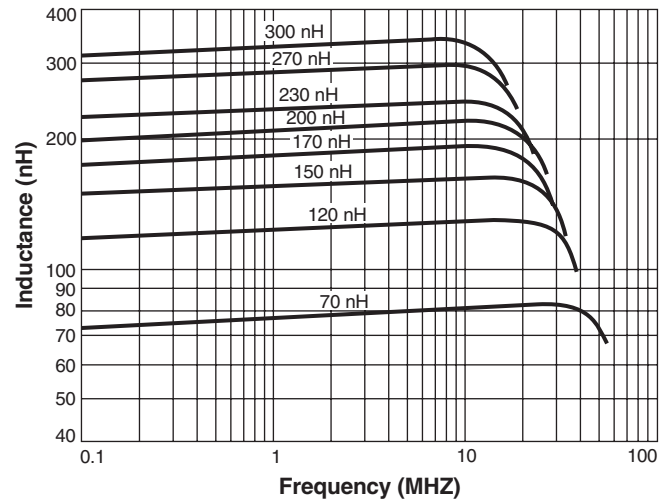


SMT Power Inductors – SLC1175 Series

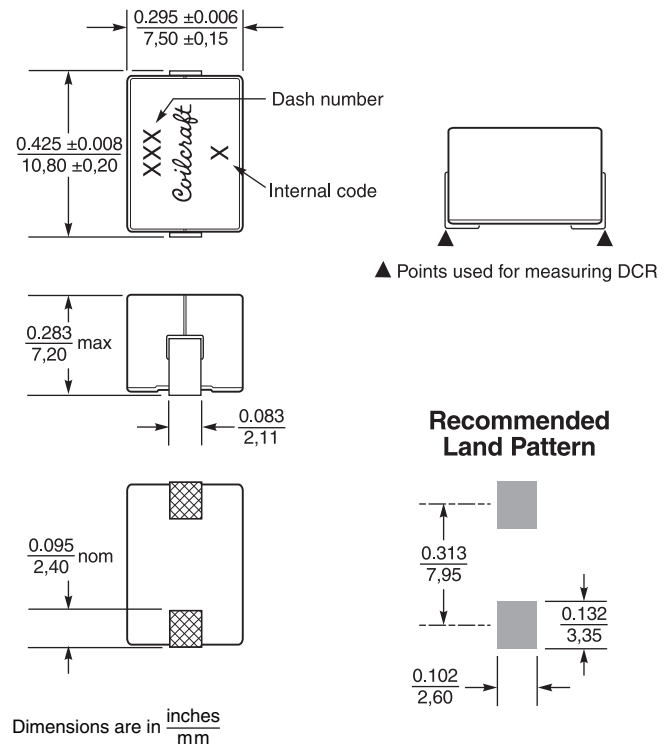
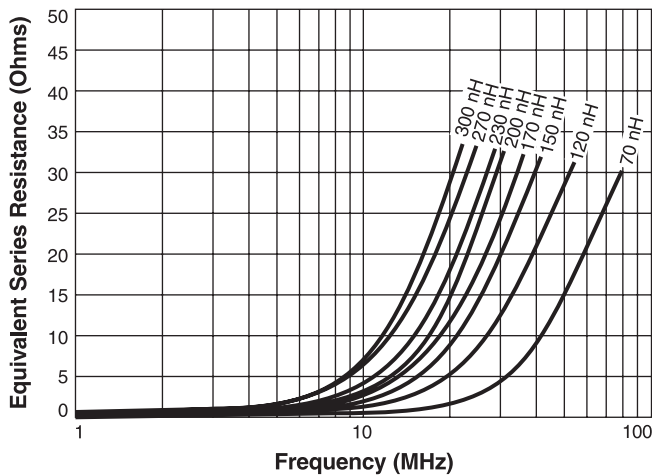
L vs Current



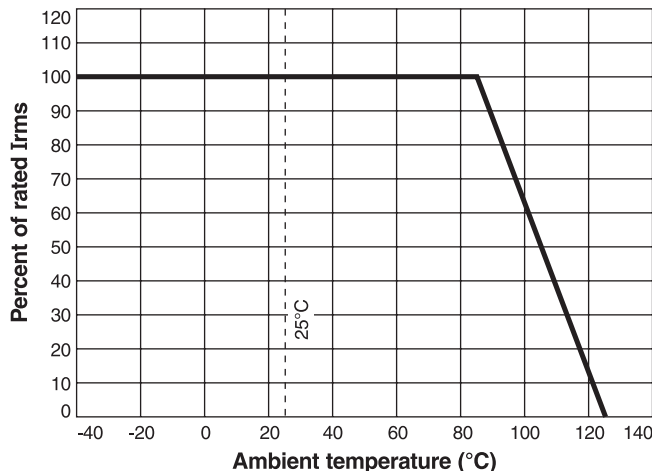
L vs Frequency



ESR vs Frequency



Irms Derating



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