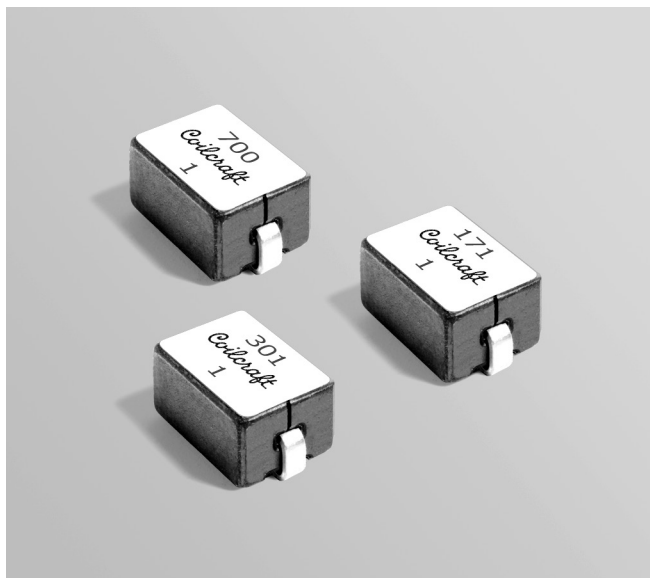


Shielded Power Inductors – SLC1175



- Ideal for use in multi-phase VRM/VRD regulators and high current/high frequency DC/DC converters.
- Offers inductance values unavailable in other high current series.

Core material Ferrite

Core and winding loss See www.coilcraft.com/coreloss

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

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

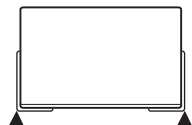
Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (150 per full reel).

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 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information](#).

6. 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](#).

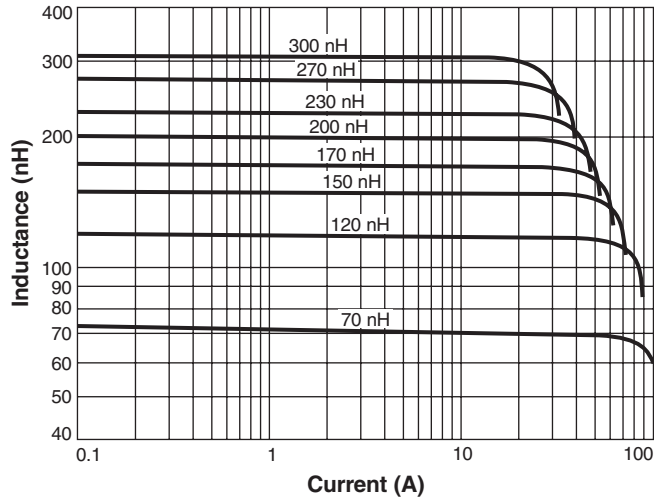
7. Electrical specifications at 25°C.

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

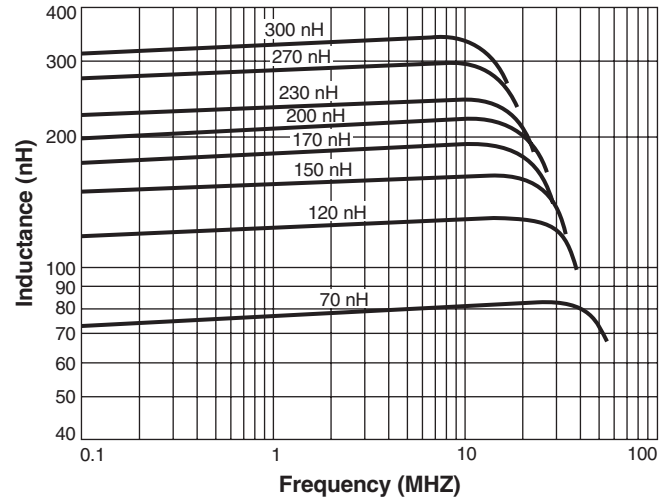


Shielded Power Inductors – SLC1175 Series

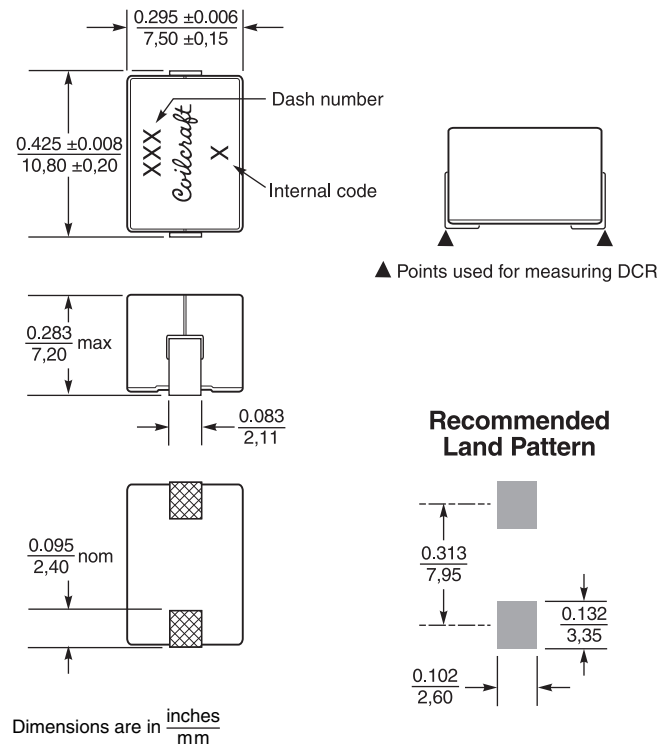
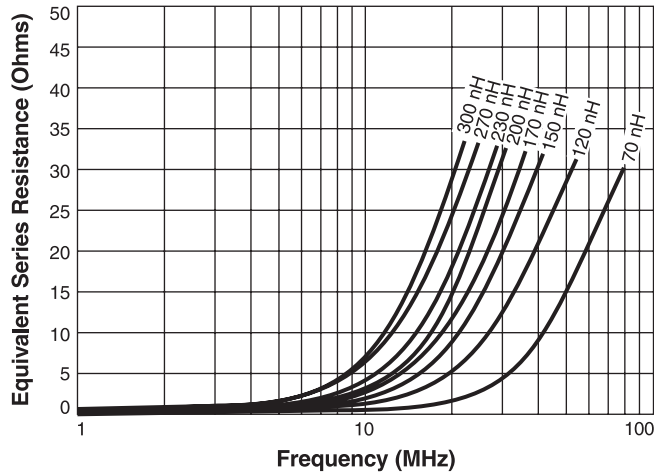
L vs Current



L vs Frequency



ESR vs Frequency



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