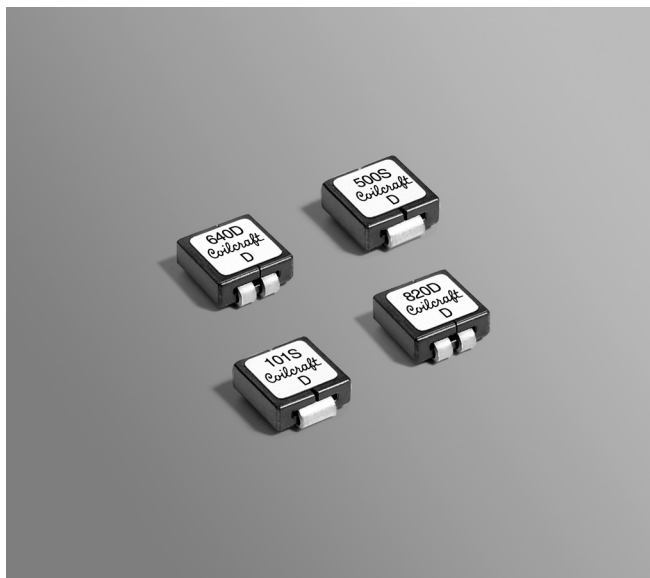


Shielded Power Inductors – SLC7530



- Designed for high-speed switch mode applications
- Can be used as a 1:1 transformer or in SEPIC applications

Designer's Kit C379 contains 3 each of all values.

Core material Ferrite

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

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

Weight: 0.44 – 0.47 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 500/7" reel; 1700/13" reel; Plastic tape: 16 mm wide, 0.33 mm thick, 12 mm pocket spacing, 3.12 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

Single Conductor

Part number ¹	L $\pm$ 20% ² (μ H)	DCR $\pm$ 5% ³ (mOhms)	SRF typ ⁴ (GHz)	Isat ⁵ (A)	Irms ⁶ (A)
SLC7530S-500ML_	0.050	0.123	3.80	50	40
SLC7530S-640ML_	0.064	0.123	3.65	32	40
SLC7530S-820ML_	0.082	0.123	3.75	22	40
SLC7530S-101ML_	0.100	0.123	3.75	20	40

Dual Conductor

Leads connected in parallel

Leads connected in series

Part number ¹	L $\pm$ 20% ² (μ H)	DCR $\pm$ 5% ³ (mOhms)	SRF typ ⁴ (GHz)	Isat ⁵ (A)	Irms ⁶ (A)	L $\pm$ 20% ² (μ H)	DCR max ³ (mOhms)	SRF typ ⁴ (GHz)	Isat ⁵ (A)	Irms ⁶ (A)
SLC7530D-500ML_	0.050	0.209	3.75	50	38	0.188	1.00	1.50	21	17
SLC7530D-640ML_	0.064	0.209	3.65	32	38	0.272	1.00	1.30	14	17
SLC7530D-820ML_	0.082	0.209	3.75	22	38	0.350	1.00	1.20	11	17
SLC7530D-101ML_	0.100	0.209	3.75	20	38	0.400	1.00	0.950	8	17

1. When ordering, please specify **termination** and **packaging** codes:

SLC7530S-101MLC

Termination: L = RoHS compliant matte tin over nickel over copper
Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or S = non-RoHS tin-lead (63/37).

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (500 parts 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 (1700 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4263B LCR meter or equivalent.

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



▲ Points used for measuring DCR

4. SRF measured using an Agilent/HP 8753ES network analyzer and a Coilcraft SMD-D fixture.

5. DC current at which the inductance drops 20% (typ) from its value without current.

6. Current that causes a 40°C rise from 25°C ambient.

7. Electrical specifications at 25°C.

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

SPICE models
ON OUR WEB SITE



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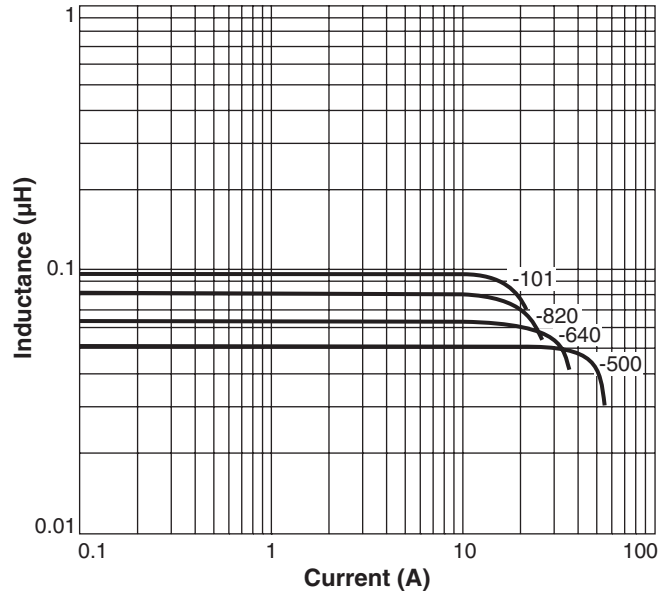
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.



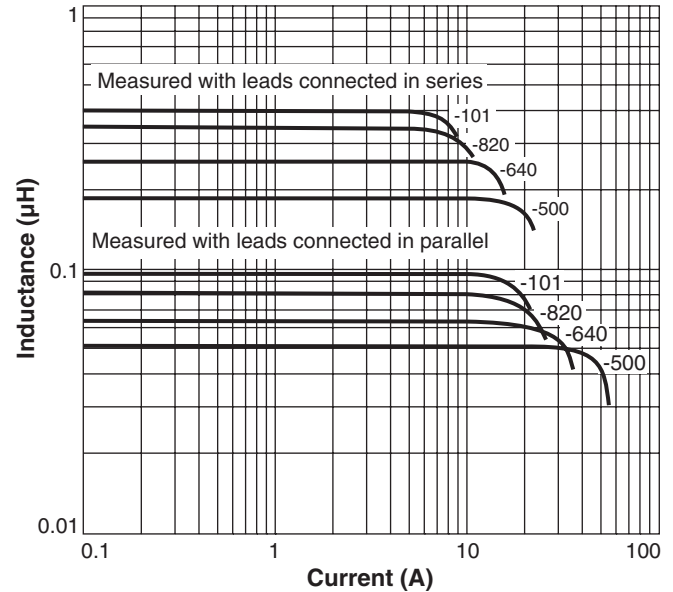
Shielded Power Inductors - SLC7530 Series

Typical L vs Current

Single Conductor

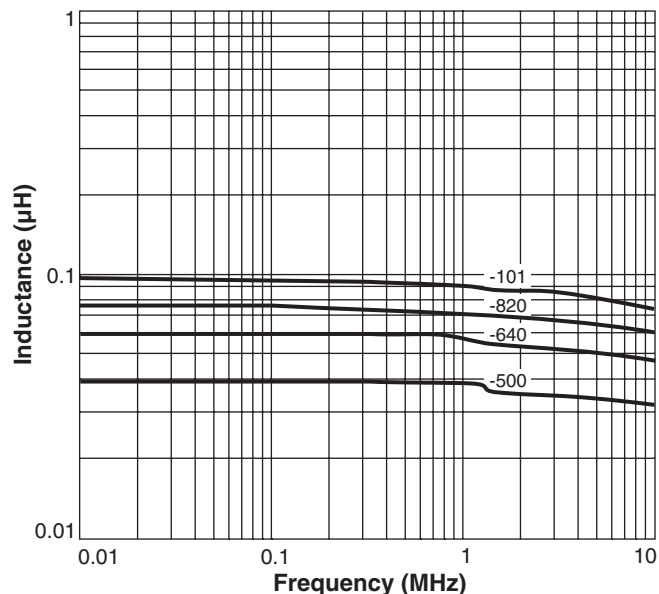


Dual Conductor

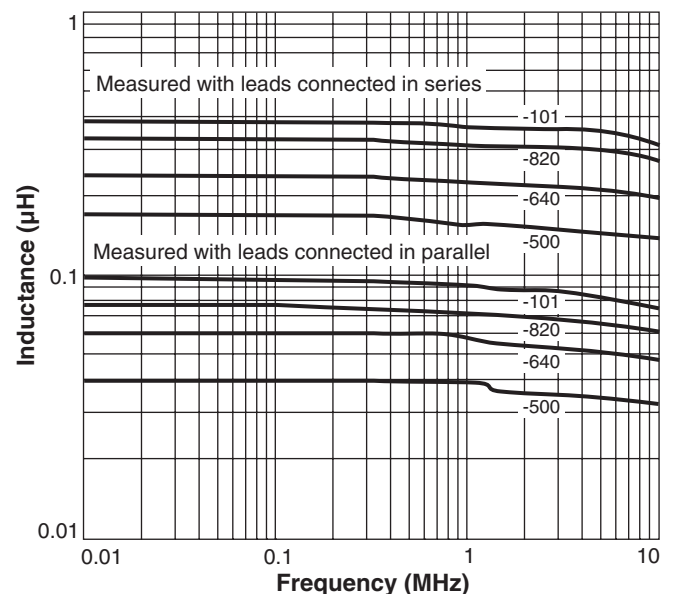


Typical L vs Frequency

Single Conductor



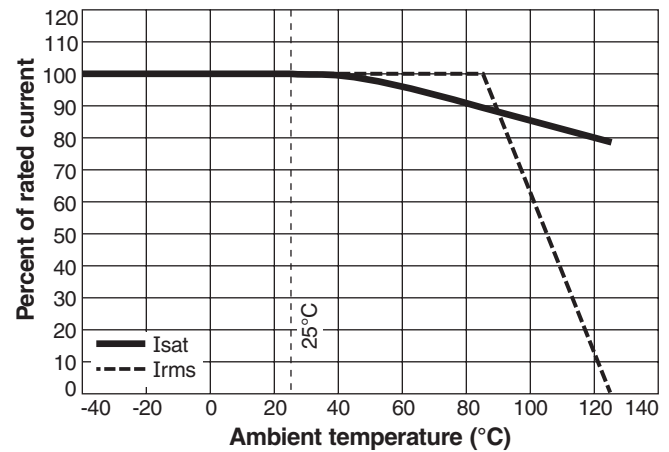
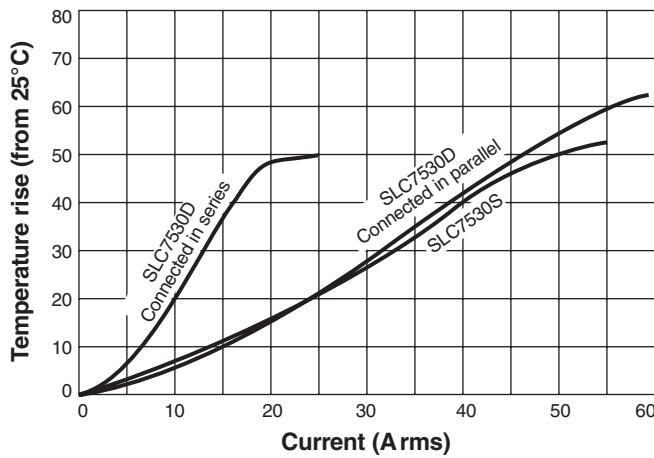
Dual Conductor



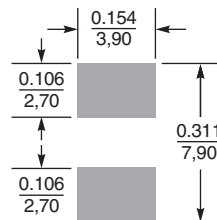
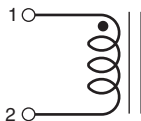
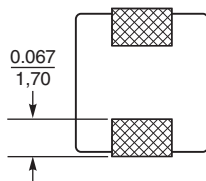
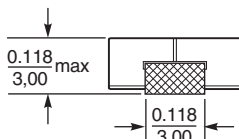
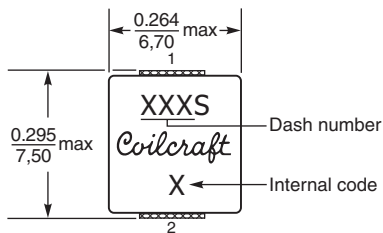


Shielded Power Inductors - SLC7530 Series

Typical Temperature Rise vs Current Current Derating



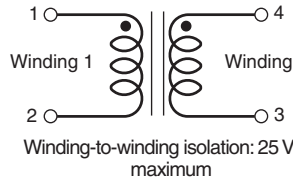
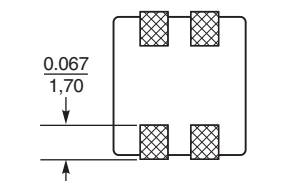
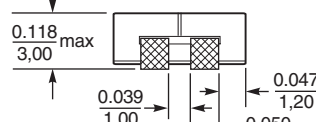
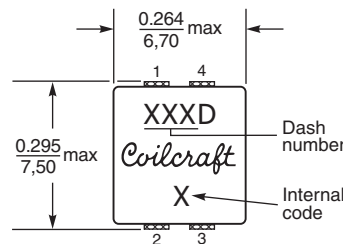
Dimensions – Single Conductor



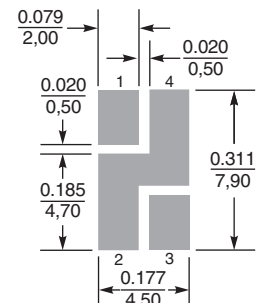
Recommended Land Pattern

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

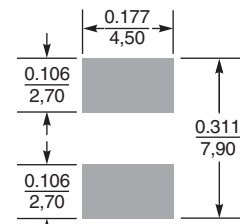
Dimensions – Dual Conductor



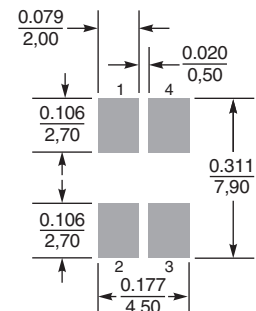
Dimensions are in $\frac{\text{inches}}{\text{mm}}$



Series mode



Parallel mode



Two conductor mode

Recommended Land Patterns



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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