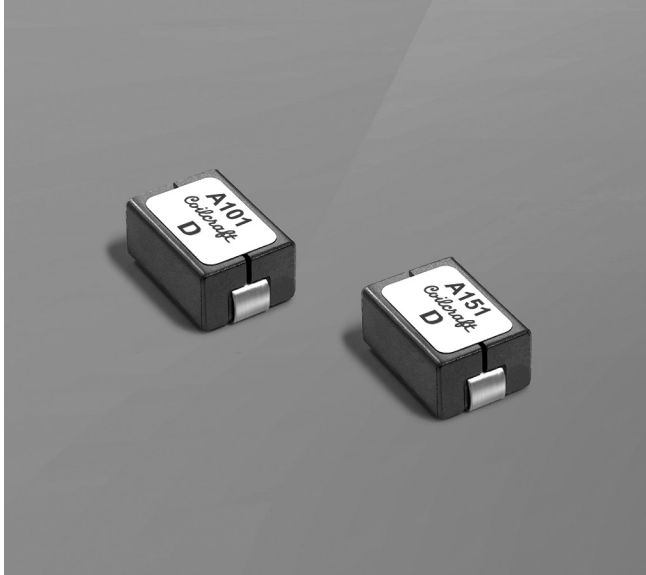


Shielded Power Inductors – SLR1050



- Tight DCR tolerance for inductor-DCR-based current sensing circuits
- Three versions for optimal efficiency and accuracy
- Excellent current handling
- 10.2 × 7.0 × 4.95 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 1.2 – 1.4 g

Environmental RoHS compliant, halogen free

Terminations RoHS compliant matte tin over nickel over copper.

Ambient temperature –40°C to +85°C with 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

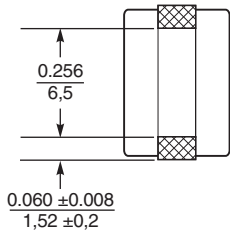
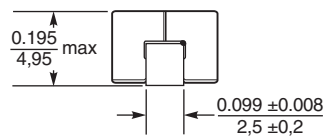
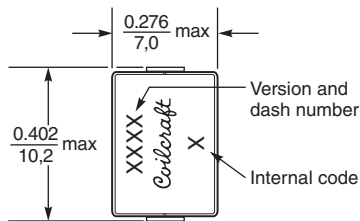
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

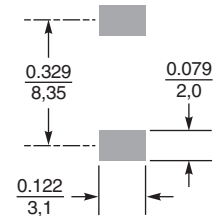
Failures in Time (FIT) / Mean Time Between Failures (MTBF)

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

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787 PCB Washing.pdf](#).

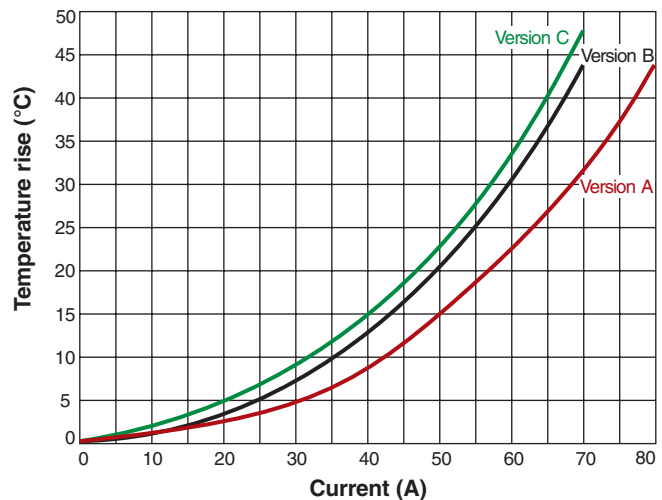


Recommended Land Pattern



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

Typical Temperature Rise (from 25°C)



Packaging 250/7" reel; 1000/13" reel; Plastic tape: 24 mm wide, 0.4 mm thick, 12 mm pocket spacing, 5.03 mm pocket depth



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 1255-1 Revised 06/01/16

© Coilcraft Inc. 2020

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.



SLR1050 Shielded Power Inductors

Part number ¹	Inductance ² ±10% (nH)	DCR ³ (mOhms)	SRF typ (MHz)	Isat (A) ⁴			Irms (A) ⁵	
				at 25°C	at 100°C	at 125°C	20°C rise	40°C rise
Lowest DCR								
SLR1050A-850KE_	85	0.39 ±7.7%	210	86	68.0	60.5	56.7	77.1
SLR1050A-101KE_	100	0.39 ±7.7%	200	78	61.5	55.0	56.7	77.1
SLR1050A-121KE_	120	0.39 ±7.7%	180	65	51.0	48.0	56.7	77.1
SLR1050A-151KE_	150	0.39 ±7.7%	90	51	38.0	36.0	56.7	77.1
SLR1050A-221KE_	220	0.39 ±7.7%	65	35	25.5	23.5	56.7	77.1
Balanced DCR/tolerance								
SLR1050B-850KE_	85	0.47 ±6.7%	210	86	68.0	60.5	48.8	67.2
SLR1050B-101KE_	100	0.47 ±6.7%	200	78	61.5	55.0	48.8	67.2
SLR1050B-121KE_	120	0.47 ±6.7%	180	65	51.0	48.0	48.8	67.2
SLR1050B-151KE_	150	0.47 ±6.7%	90	51	38.0	36.0	48.8	67.2
SLR1050B-221KE_	220	0.47 ±6.7%	65	35	25.5	23.5	48.8	67.2
Tightest DCR tolerance								
SLR1050C-850KE_	85	0.55 ±5.4%	210	86	68.0	60.5	46.7	65.0
SLR1050C-101KE_	100	0.55 ±5.4%	200	78	61.5	55.0	46.7	65.0
SLR1050C-121KE_	120	0.55 ±5.4%	180	65	51.0	48.0	46.7	65.0
SLR1050C-151KE_	150	0.55 ±5.4%	90	51	38.0	36.0	46.7	65.0
SLR1050C-221KE_	220	0.55 ±5.4%	65	35	25.5	23.5	46.7	65.0

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

SLR1050C-221KEC

- Version** **A** = Lowest DCR; **B** = Balanced DCR/DCR tol;
 C = Tightest DCR tolerance
- Packaging:** **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (250 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 (1000 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



4. DC current at 25°C that causes an inductance drop of 20% (typ) from its value without current. [Click for temperature derating information.](#)
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. [Click for temperature derating information.](#)
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.



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 1255-2 Revised 06/01/16

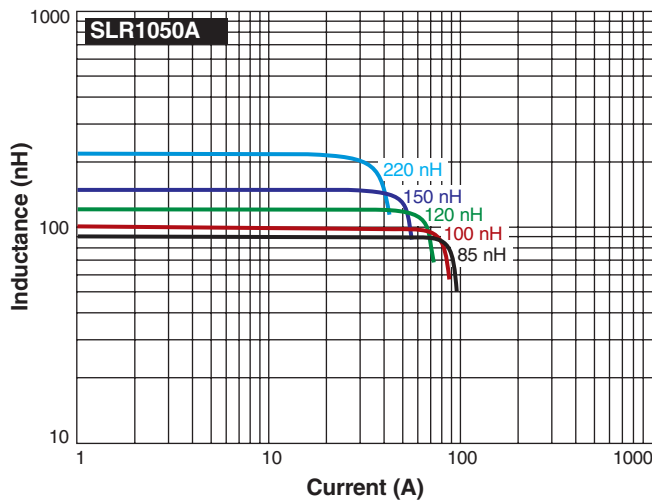
© Coilcraft Inc. 2020

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.

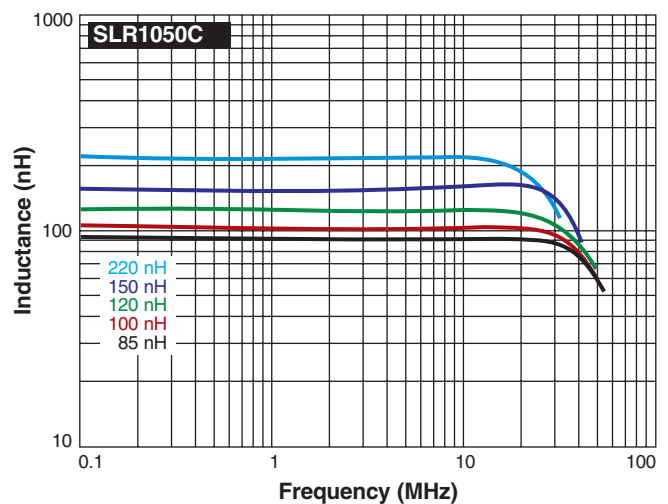
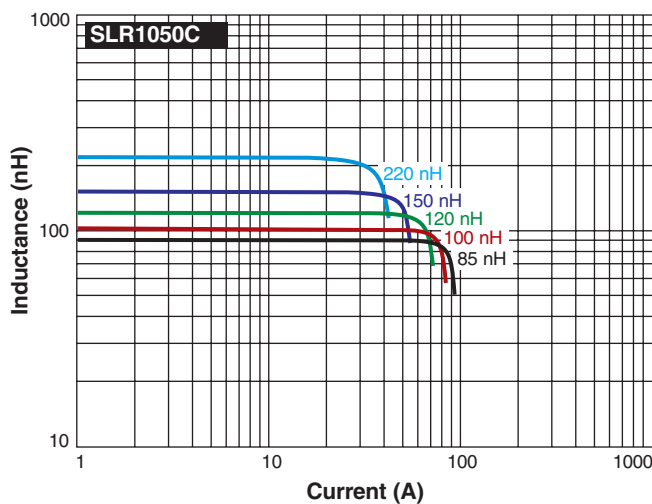
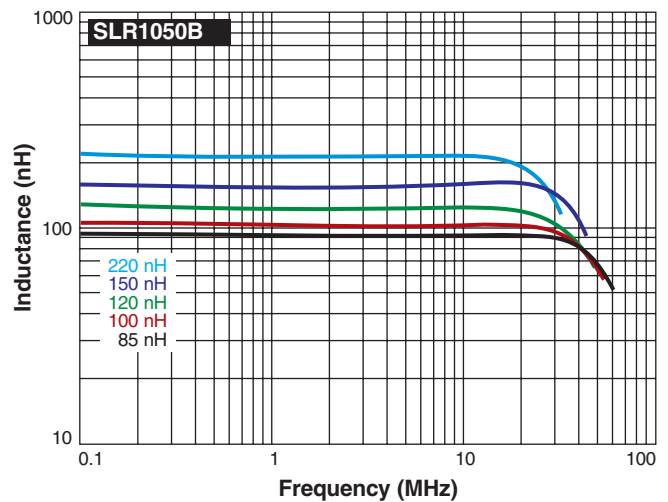
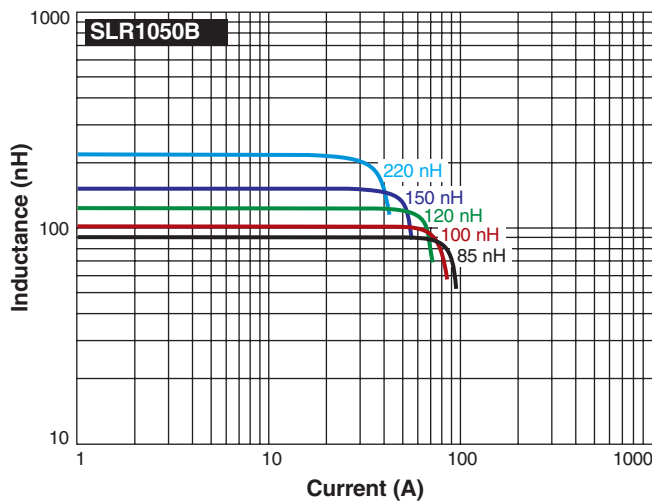
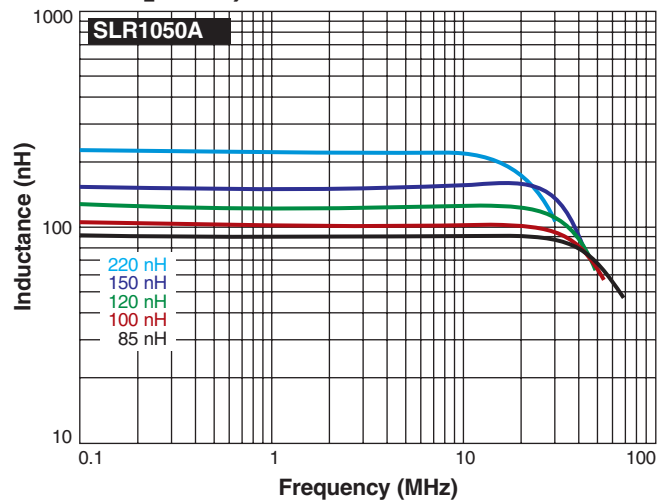


SLR1050 Shielded Power Inductors

L vs Current



L vs Frequency



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 1255-3 Revised 06/01/16

© Coilcraft Inc. 2020

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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- 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

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.