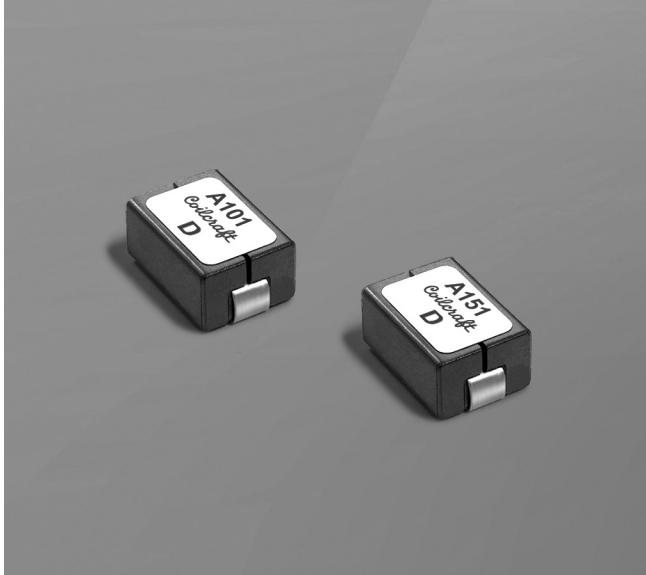


Shielded Power Inductors – SLR1050



- 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

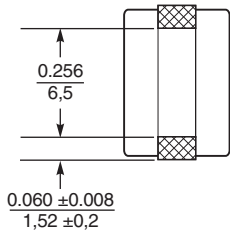
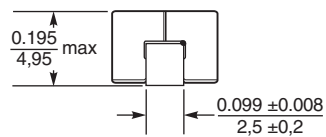
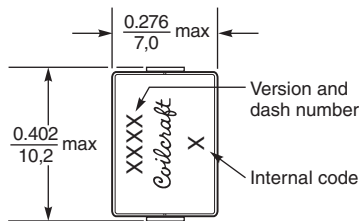
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

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

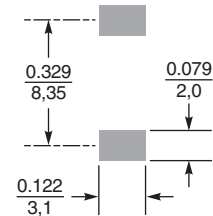
Failures in Time (FIT) / Mean Time Between Failures (MTBF)

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](#).

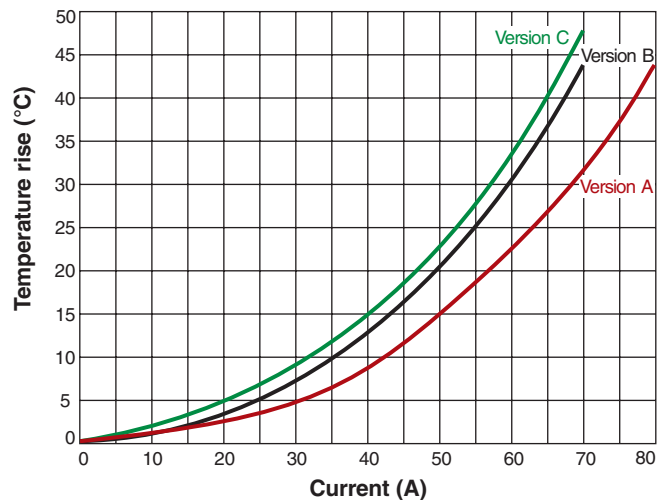


Recommended Land Pattern



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



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

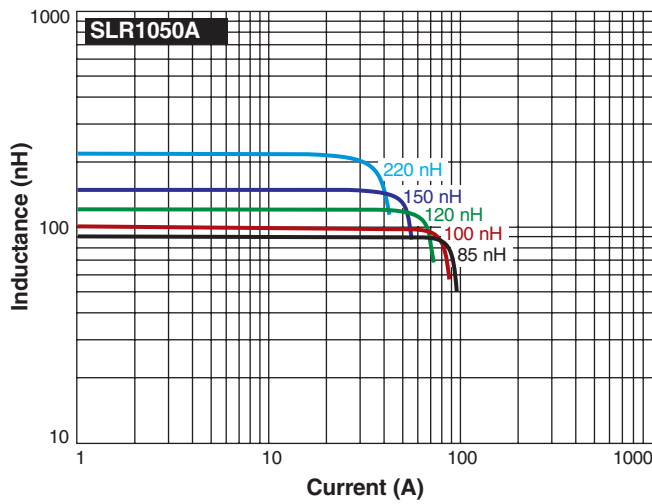
© Coilcraft Inc. 2020

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.

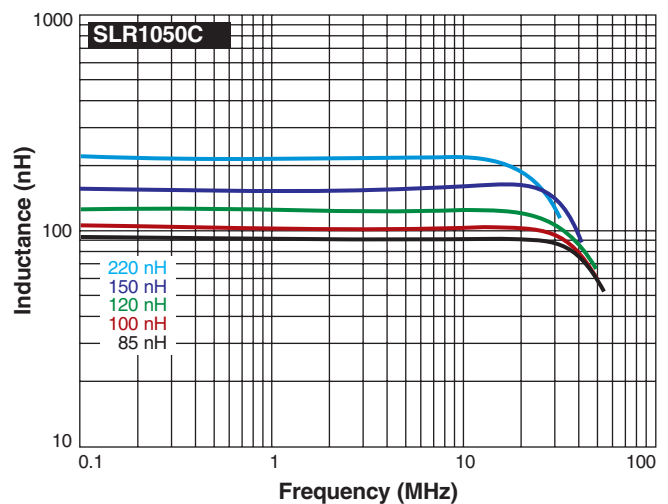
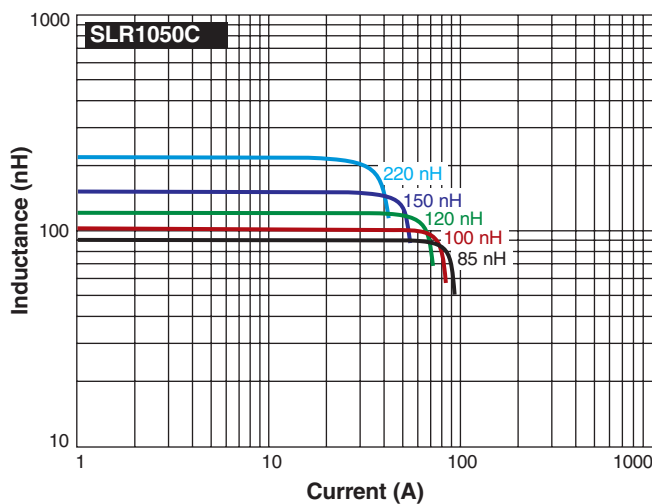
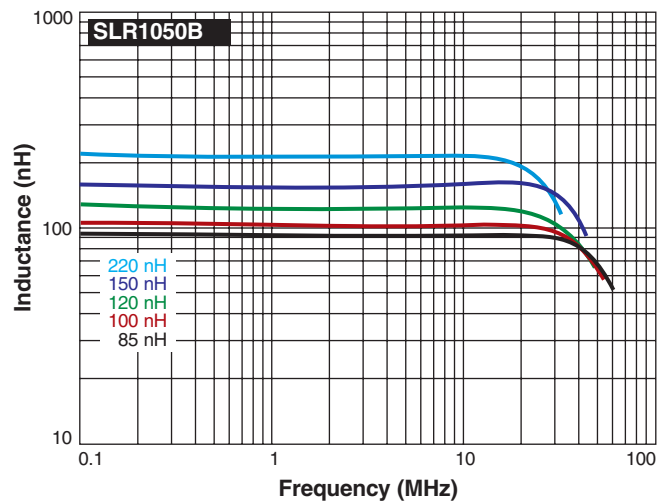
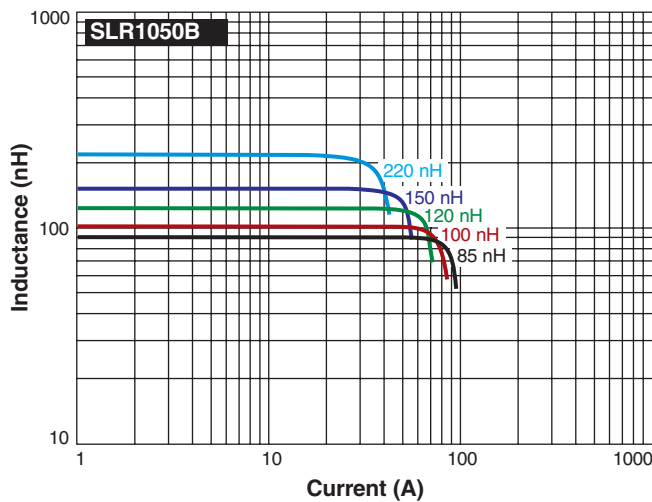
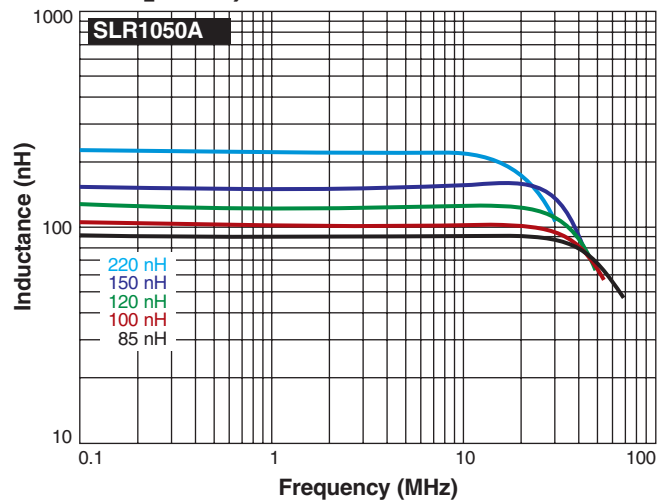


SLR1050 Shielded Power Inductors

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.

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9