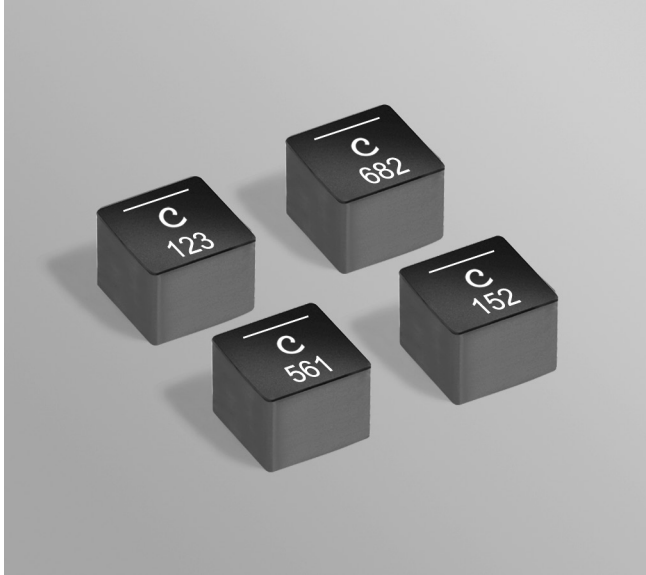


Shielded Power Inductors – XEL6060



- AEC-Q200 Grade 1 qualified
- Extremely low DCR and ultra low AC losses for high switching frequencies (2 to 5 MHz)
- Superior current handling with soft saturation characteristics
- Can withstand high current spikes

Designer's Kit C466 contains 3 of each value

Core material Composite

Environment RoHS compliant, halogen free

Terminations RoHS compliant tin-silver (96.5/3.5) over copper. Other terminations available at additional cost.

Weight 1.23 – 1.31 g

Operating voltage 0 – 80 V

Ambient temperature –40°C to +125°C with (40°C rise) Irms current.

Maximum part temperature +165°C (ambient + temp rise). Derating.

Storage temperature Component: –55°C to +165°C.

Tape and reel packaging: –55°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](#).

Part number ¹	Inductance ² ±20% (µH)	DCR (mOhms) ³		SRF typ ⁴ (MHz)	Isat ⁵ (A)	Irms (A) ⁶	
		typ	max			20°C rise	40°C rise
XEL6060-331ME_	0.33	1.98	2.20	79	30.0	23.6	31.8
XEL6060-561ME_	0.56	2.60	2.90	59	23.0	20.6	27.7
XEL6060-821ME_	0.82	3.03	3.33	52	20.0	19.1	25.7
XEL6060-102ME_	1.0	3.70	4.07	47	20.0	17.2	23.2
XEL6060-152ME_	1.5	4.28	4.71	41	19.0	16.0	21.6
XEL6060-222ME_	2.2	6.10	6.70	33	16.0	13.4	18.1
XEL6060-272ME_	2.7	6.94	7.63	26	13.8	12.6	17.0
XEL6060-472ME_	4.7	13.65	15.02	23	11.4	9.0	12.1
XEL6060-682ME_	6.8	20.82	22.90	16	7.9	7.3	9.8
XEL6060-822ME_	8.2	22.71	24.98	15	7.6	7.0	9.4
XEL6060-123ME_	12	36.66	40.33	12	5.8	5.5	7.4

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.

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

XEL6060-123MEC

Termination: E = RoHS compliant tin-silver 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 (250 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

D = 13" machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (750 parts per full reel).

2. Inductance tested at 1 MHz, 0.1 Vrms, 0 Adc.

3. DCR measured on a micro-ohmmeter.

4. SRF measured using Agilent/HP 4395A or equivalent.

5. DC current at 25°C that causes an inductance drop of 30% (typ) 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.



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 1359-1 Revised 12/23/19

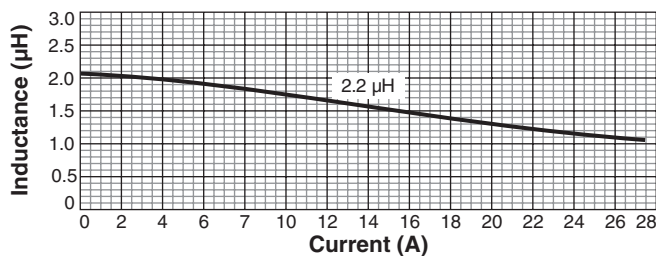
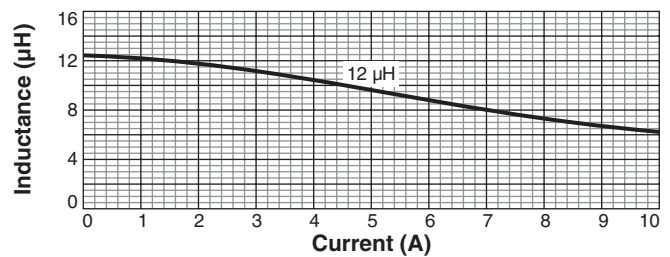
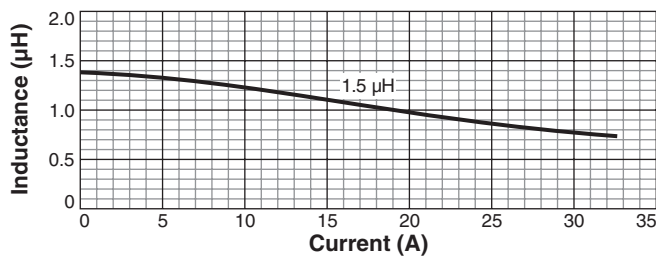
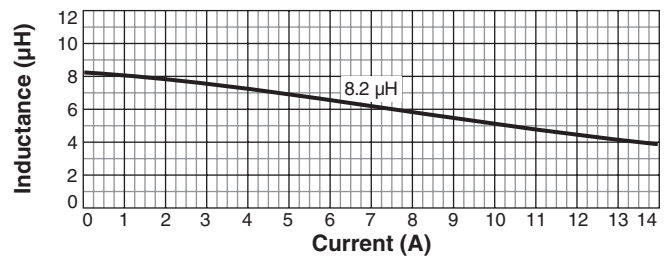
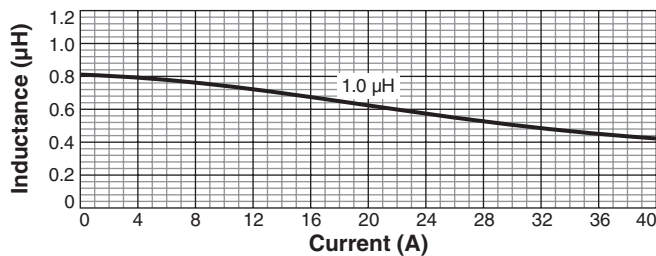
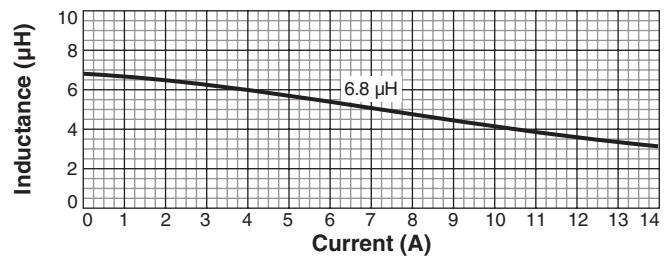
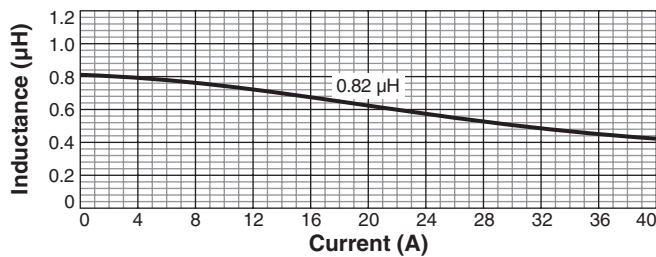
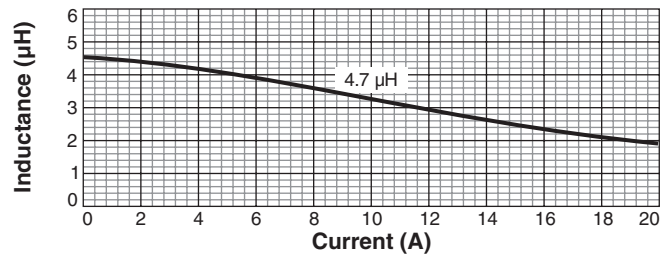
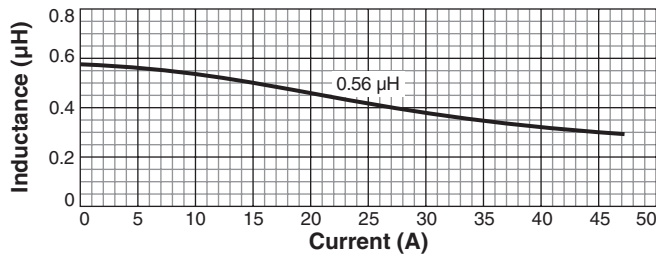
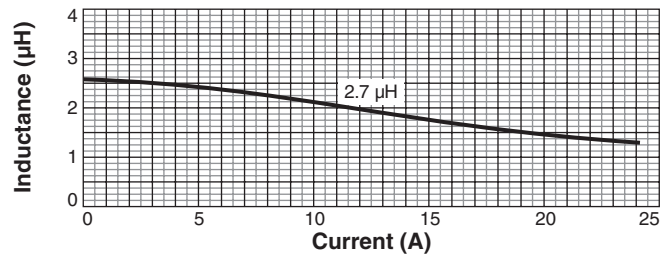
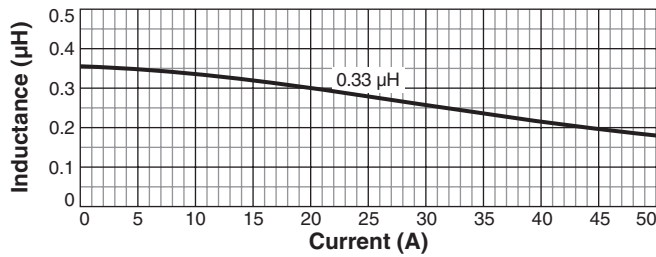
© Coilcraft Inc. 2019

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.

HIGH TEMPERATURE

Shielded Power Inductors – XEL6060

L vs Current



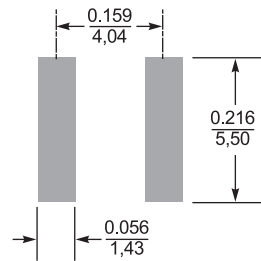
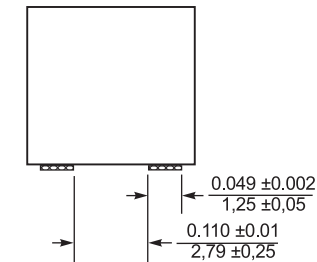
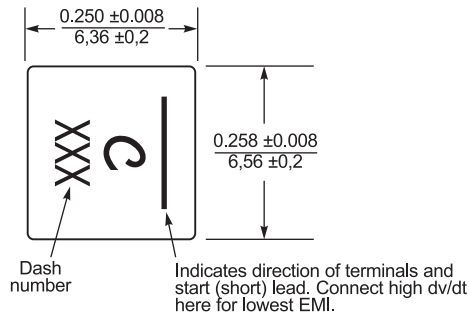
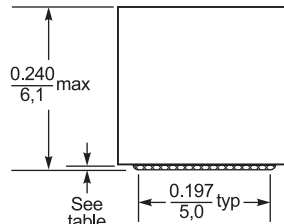
www.coilcraft.com

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

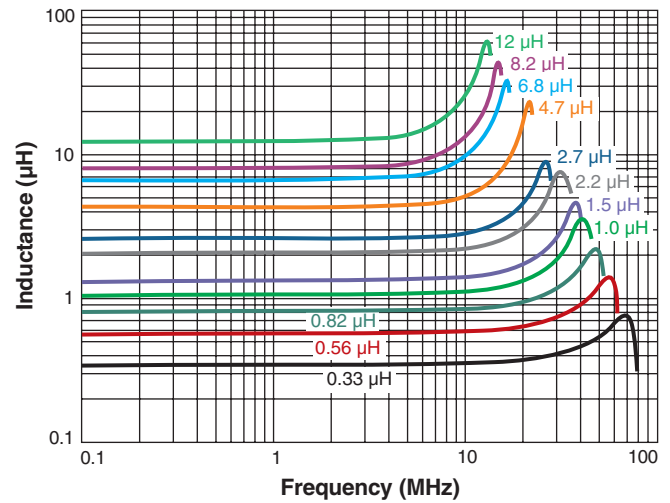
Document 1359-2 Revised 12/23/19

© Coilcraft Inc. 2019

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.

HIGH TEMPERATURE**Shielded Power Inductors – XEL6060****Recommended Land Pattern**

Dash number	Terminal thickness (typ) (in / mm)
-331	0.0138 / 0.35
-561	0.0138 / 0.35
-821	0.0138 / 0.35
-102	0.0138 / 0.35
-152	0.0138 / 0.35
-222	0.0118 / 0.30
-272	0.0118 / 0.30
-472	0.0079 / 0.20
-682	0.0079 / 0.20
-822	0.0059 / 0.15
-123	0.0059 / 0.15

Dimensions are in $\frac{\text{inches}}{\text{mm}}$ **L vs Frequency**

Packaging 250/7" reel; 750/13" reel Plastic tape: 16 mm wide, 0.3 mm thick, 8 mm pocket spacing, 6.23 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 1359-3 Revised 12/23/19

© Coilcraft Inc. 2019

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