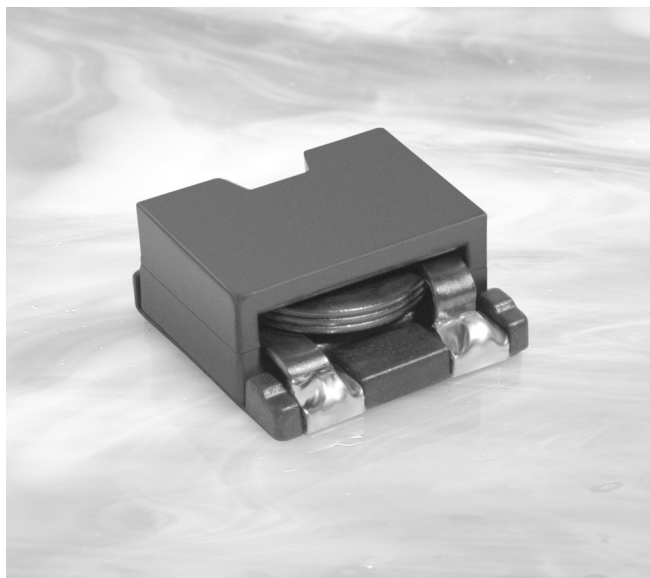




# Shielded Power Inductors – SER1360



The SER1360 series provides exceptionally high current carrying capability (up to 43 Amps) and very low DC resistance, all in a low profile, small footprint package.

The part's magnetic shielding and 13 × 13 mm base allow high density mounting while the flat wire winding keeps the overall height to just 6 mm.

In addition to the standard values show, custom values are available to meet specific applications.

| Part number <sup>1</sup> | Inductance <sup>2</sup><br>±10% (µH) | DCR (mOhm) <sup>3</sup> |       | SRF typ <sup>4</sup><br>(MHz) | Isat (A) <sup>5</sup> |          |          | Irms (A) <sup>6</sup> |           |
|--------------------------|--------------------------------------|-------------------------|-------|-------------------------------|-----------------------|----------|----------|-----------------------|-----------|
|                          |                                      | typ                     | max   |                               | 10% drop              | 20% drop | 30% drop | 20°C rise             | 40°C rise |
| SER1360-331KL_           | 0.33                                 | 0.77                    | 0.85  | 200                           | 36                    | 41       | 43       | 13.0                  | 16.9      |
| SER1360-651KL_           | 0.65                                 | 0.77                    | 0.85  | 160                           | 23                    | 27       | 28       | 13.0                  | 16.9      |
| SER1360-102KL_           | 1.0                                  | 2.36                    | 2.60  | 75                            | 32                    | 33       | 33.5     | 9.5                   | 13.0      |
| SER1360-182KL_           | 1.8                                  | 2.36                    | 2.60  | 50                            | 17                    | 19       | 20       | 9.5                   | 13.0      |
| SER1360-272KL_           | 2.7                                  | 2.36                    | 2.60  | 42                            | 12                    | 13       | 14       | 9.5                   | 13.0      |
| SER1360-402KL_           | 4.0                                  | 5.50                    | 6.05  | 34                            | 11                    | 12       | 13       | 7.1                   | 9.4       |
| SER1360-472KL_           | 4.7                                  | 5.50                    | 6.05  | 32                            | 9.5                   | 11       | 12       | 7.1                   | 9.4       |
| SER1360-602KL_           | 6.0                                  | 5.50                    | 6.05  | 28                            | 8.0                   | 9.0      | 9.5      | 7.1                   | 9.4       |
| SER1360-802KL_           | 8.0                                  | 9.83                    | 10.81 | 26                            | 7.5                   | 8.5      | 9.0      | 5.5                   | 7.6       |
| SER1360-103KL_           | 10                                   | 9.83                    | 10.81 | 24                            | 6.2                   | 7.0      | 7.5      | 4.4                   | 7.2       |

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

#### SER1360-103KLD

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

**Packaging:** D = 13" 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 D instead.

- Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A or equivalent.
  - DCR measured on a micro-ohmmeter.
  - SRF measured using an Agilent/HP 4395A network analyzer and an Agilent/HP 16193A test fixture.
  - DC current at which the inductance drops the specified amount from its value without current.
  - Current that causes the specified temperature rise from 25°C ambient.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

**Designer's Kit C365** contains 3 each of all values

**Core material** Ferrite

**Core and winding loss** See [www.coilcraft.com/coreloss](http://www.coilcraft.com/coreloss)

**Terminations** RoHS compliant tin-silver over tin over nickel over phos bronze (pins 1 and 2); matte tin over nickel over phos bronze (pin 3). Other terminations available at additional cost.

**Weight** 2.6 – 2.8 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 per 13" reel; Plastic tape: 24 mm wide, 0.4 mm thick, 16 mm pocket spacing, 6.6 mm pocket depth

**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf.



[www.coilcraft.com](http://www.coilcraft.com)

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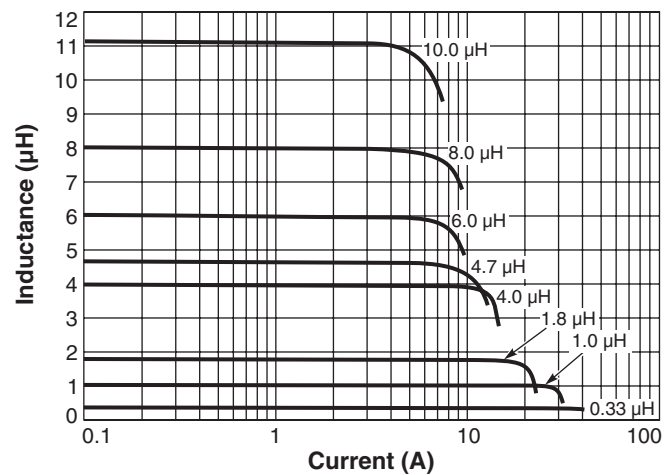
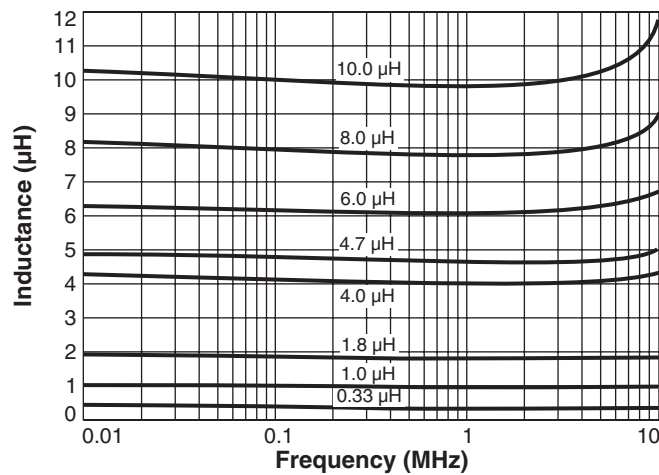
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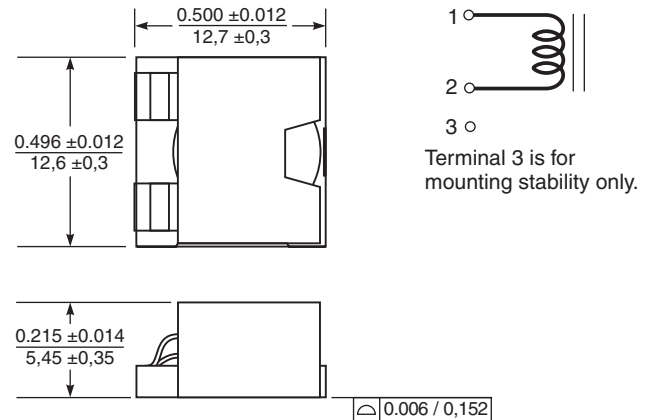
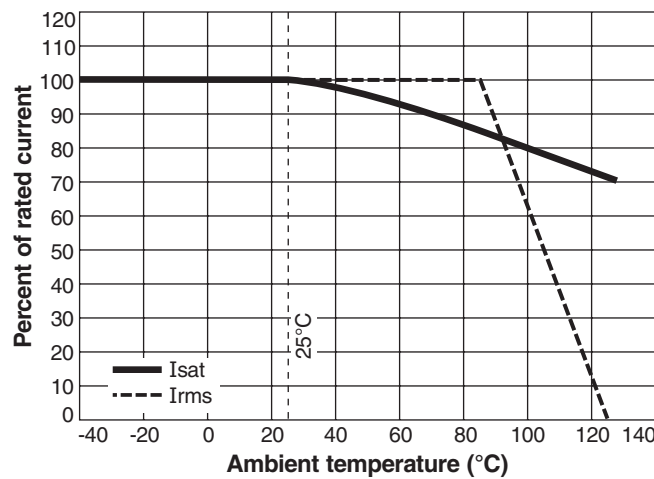


# Shielded Power Inductors - SER1360 Series

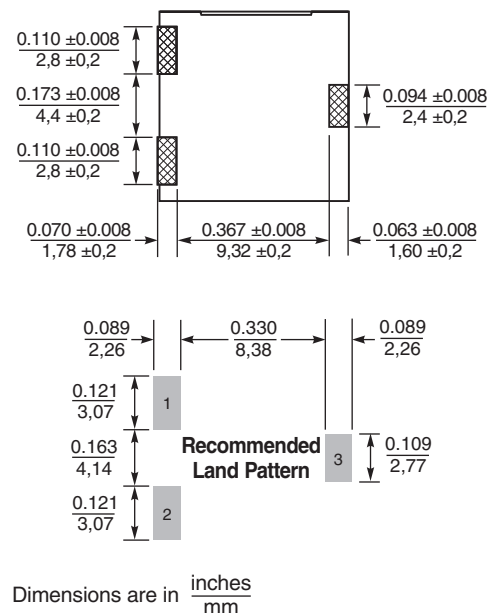
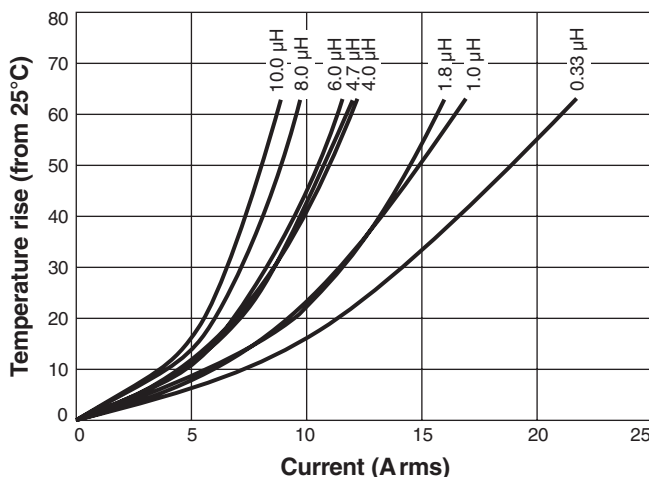
## Typical L vs Frequency Typical L vs Current



## Current Derating



## Temperature Rise vs Current



## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

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<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.

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