

**NEW!**

# SMT Power Inductors - SER2900 Series



- Same electrical specifications as Coilcraft's SER2800
- Extremely low DCR; Current handling to >100 Amps
- Third mounting pad for greater stability and board adhesion

**Core material** Ferrite

**Terminations** Leads: RoHS compliant tin-silver over copper.  
Base pad: RoHS compliant gold over nickel over phos bronze.  
Other terminations available at additional cost.

**Weight** SER2915L – 28.5 g; SER2915H – 29.7 g;  
SER2918H – 35.7 g

**Ambient temperature** –40°C to +85°C with I<sub>rms</sub> current, +85°C to +125°C with derated current

**Storage temperature** Component: –40°C to +125°C.  
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** 25 pieces per tray

**PCB washing** Only pure water or alcohol recommended

| Part number <sup>1</sup> | Inductance <sup>2</sup><br>±10%<br>(μH) | DCR <sup>3</sup><br>(mOhms) |      | SRF<br>typ <sup>4</sup><br>(MHz) | Isat (A) <sup>5</sup> |             |             | Irms (A) <sup>6</sup> |              |
|--------------------------|-----------------------------------------|-----------------------------|------|----------------------------------|-----------------------|-------------|-------------|-----------------------|--------------|
|                          |                                         | nom                         | max  |                                  | 10%<br>drop           | 20%<br>drop | 30%<br>drop | 20°C<br>rise          | 40°C<br>rise |
| SER2915L-152KL           | 1.5                                     | 1.50                        | 1.65 | 60                               | 100                   | >100        | >100        | 20                    | 30           |
| SER2915H-222KL           | 2.2                                     | 1.86                        | 2.05 | 40                               | 100                   | >100        | >100        | 20                    | 30           |
| SER2915L-222KL           | 2.2                                     | 1.50                        | 1.65 | 50                               | 82.0                  | 84.0        | 84.8        | 20                    | 30           |
| SER2918H-332KL           | 3.3                                     | 2.60                        | 2.86 | 40                               | 91.0                  | 92.5        | 93.6        | 20                    | 28           |
| SER2915H-332KL           | 3.3                                     | 1.86                        | 2.05 | 30                               | 62.0                  | 66.9        | 68.4        | 20                    | 30           |
| SER2915L-332KL           | 3.3                                     | 1.50                        | 1.65 | 40                               | 48.0                  | 54.0        | 57.0        | 20                    | 30           |
| SER2918H-472KL           | 4.7                                     | 2.60                        | 2.86 | 30                               | 59.0                  | 61.2        | 62.4        | 20                    | 28           |
| SER2915H-472KL           | 4.7                                     | 1.86                        | 2.05 | 25                               | 42.0                  | 48.0        | 50.1        | 20                    | 30           |
| SER2915L-472KL           | 4.7                                     | 1.50                        | 1.65 | 30                               | 33.0                  | 36.9        | 39.0        | 20                    | 30           |
| SER2918H-682KL           | 6.8                                     | 2.60                        | 2.86 | 25                               | 42.0                  | 45.0        | 45.9        | 20                    | 28           |
| SER2915H-682KL           | 6.8                                     | 1.86                        | 2.05 | 20                               | 30.0                  | 34.5        | 36.2        | 20                    | 30           |
| SER2915L-682KL           | 6.8                                     | 1.50                        | 1.65 | 25                               | 22.0                  | 26.0        | 27.8        | 20                    | 30           |
| SER2918H-103KL           | 10                                      | 2.60                        | 2.86 | 20                               | 28.0                  | 31.2        | 32.1        | 20                    | 28           |
| SER2915H-103KL           | 10                                      | 1.86                        | 2.05 | 15                               | 18.0                  | 21.5        | 23.4        | 20                    | 30           |
| SER2915L-103KL           | 10                                      | 1.50                        | 1.65 | 20                               | 13.0                  | 16.2        | 17.6        | 20                    | 30           |
| SER2918H-153KL           | 15                                      | 2.60                        | 2.86 | 16                               | 18.0                  | 21.2        | 21.9        | 20                    | 28           |
| SER2915H-153KL           | 15                                      | 1.86                        | 2.05 | 12                               | 11.5                  | 14.0        | 15.2        | 20                    | 30           |
| SER2915L-153KL           | 15                                      | 1.50                        | 1.65 | 15                               | 7.5                   | 9.8         | 11.0        | 20                    | 30           |
| SER2918H-223KL           | 22                                      | 2.60                        | 2.86 | 15                               | 12.0                  | 14.0        | 15.0        | 20                    | 28           |
| SER2915H-223KL           | 22                                      | 1.86                        | 2.05 | 10                               | 7.0                   | 8.6         | 9.6         | 20                    | 30           |
| SER2915L-223KL           | 22                                      | 1.50                        | 1.65 | 10                               | 4.5                   | 6.0         | 6.8         | 20                    | 30           |
| SER2918H-333KL           | 33                                      | 2.60                        | 2.86 | 10                               | 7.0                   | 8.7         | 9.6         | 20                    | 28           |
| SER2915H-333KL           | 33                                      | 1.86                        | 2.05 | 8                                | 4.0                   | 5.1         | 5.9         | 20                    | 30           |
| SER2915L-333KL           | 33                                      | 1.50                        | 1.65 | 7                                | 2.0                   | 2.6         | 3.3         | 20                    | 30           |

1. When ordering, specify **termination** code:

SER2915-333KL  
↓

**Termination:** L = 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).

2. Inductance measured at 500 kHz, 0.1 V<sub>rms</sub>, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent.
3. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
4. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
5. Peak dc current at which the inductance drops the specified amount from its value without current. When Isat rating is less than I<sub>rms</sub>, Isat is the more critical specification.
6. Current that causes the specified temperature rise from 25°C ambient. When I<sub>rms</sub> is greater than Isat, Isat is the more critical specification, and I<sub>rms</sub> is shown in gray type. See Temperature Rise vs Current curve on next page.
7. Electrical specifications at 25°C.  
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

# Coilcraft®

Specifications subject to change without notice.  
Please check our website for latest information.

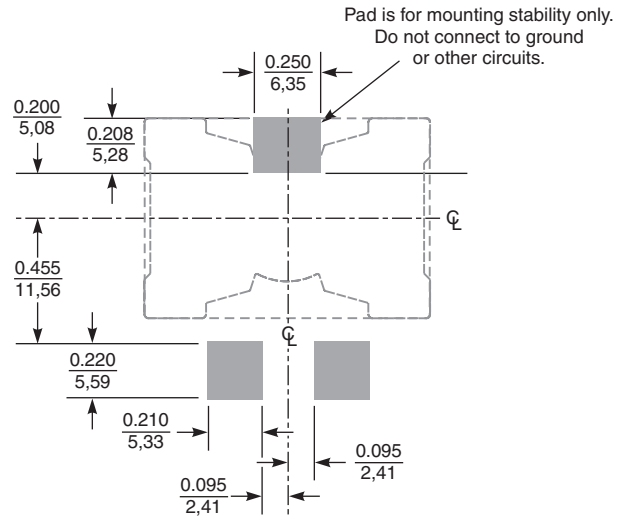
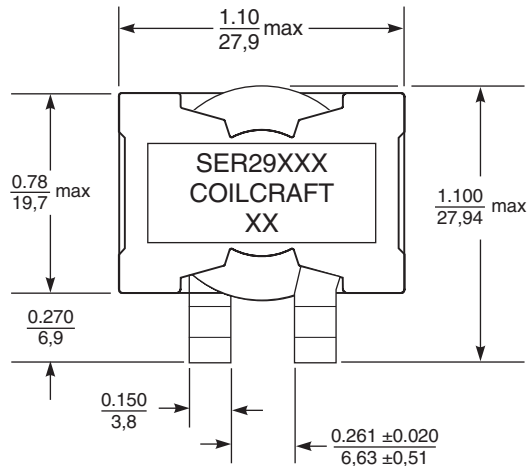
Document 644-1 Revised 11/30/09

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

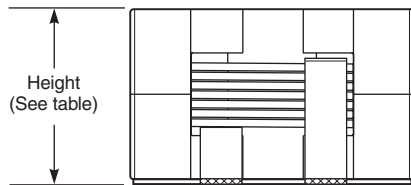
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

**NEW!**

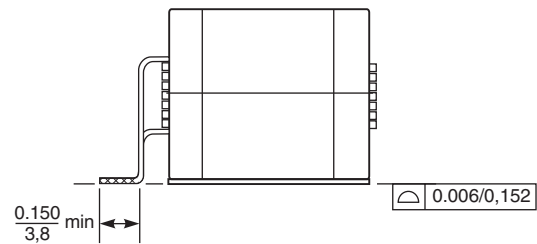
# SMT Power Inductors - SER2900 Series



**Recommended Land Pattern**

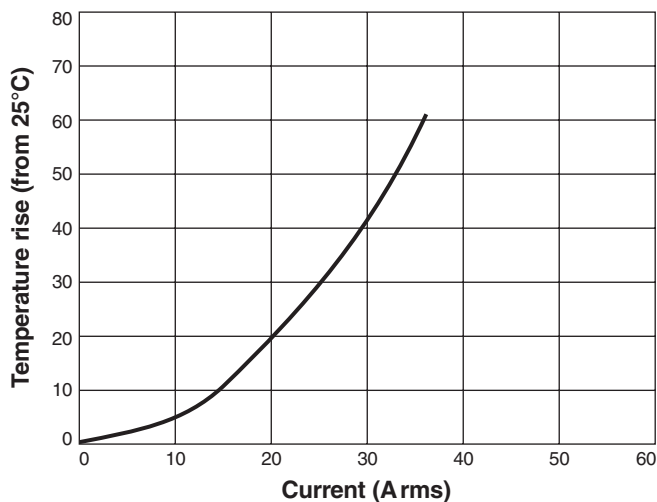


|          | Maximum height |
|----------|----------------|
| SER2915L | 0.605 / 15,36  |
| SER2915H | 0.605 / 15,36  |
| SER2918H | 0.700 / 17,78  |

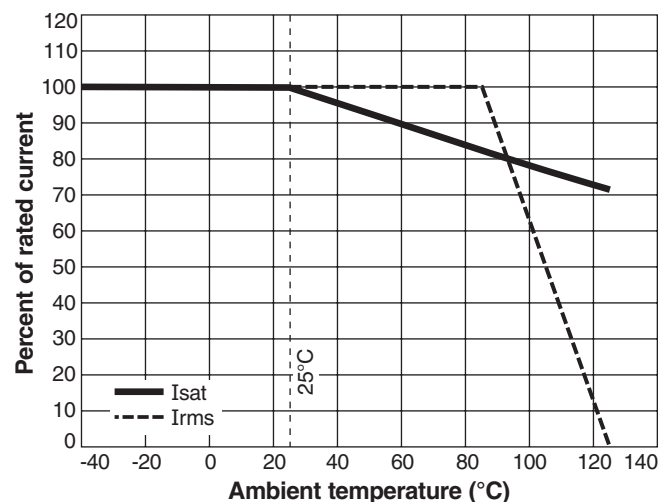


Dimensions are in  $\frac{\text{inches}}{\text{mm}}$

## Temperature Rise vs Current



## Current Derating



**Coilcraft®**

Specifications subject to change without notice.  
Please check our website for latest information.

Document 644-2 Revised 11/30/09

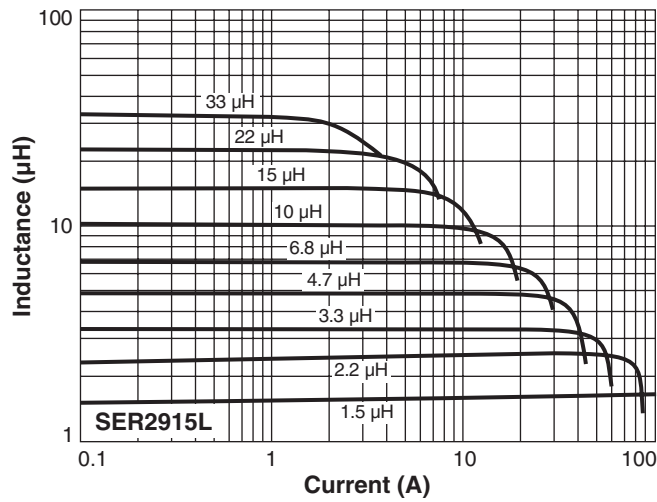
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

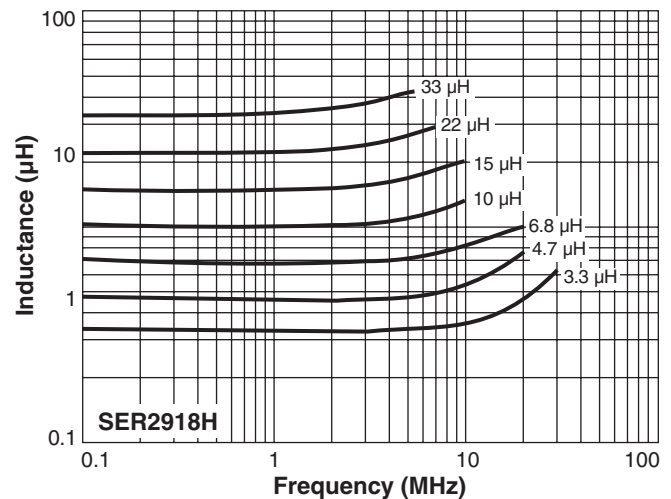
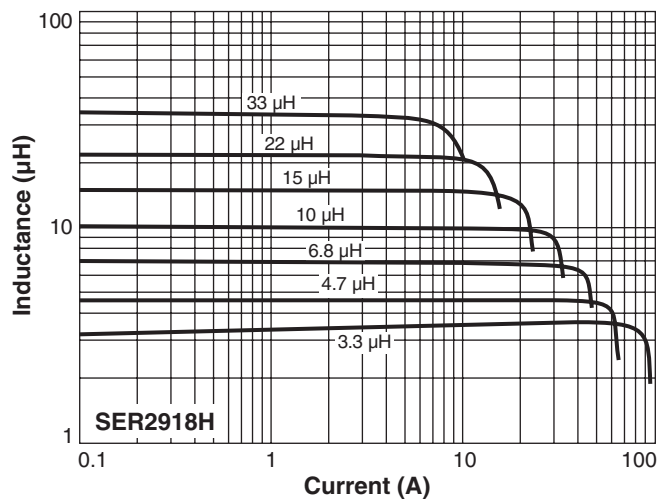
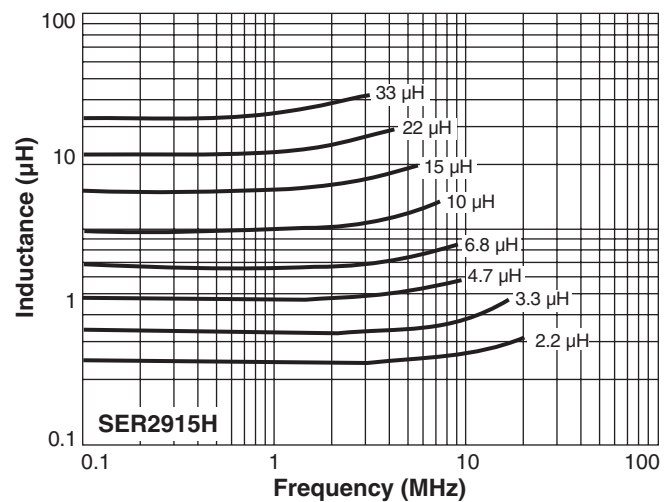
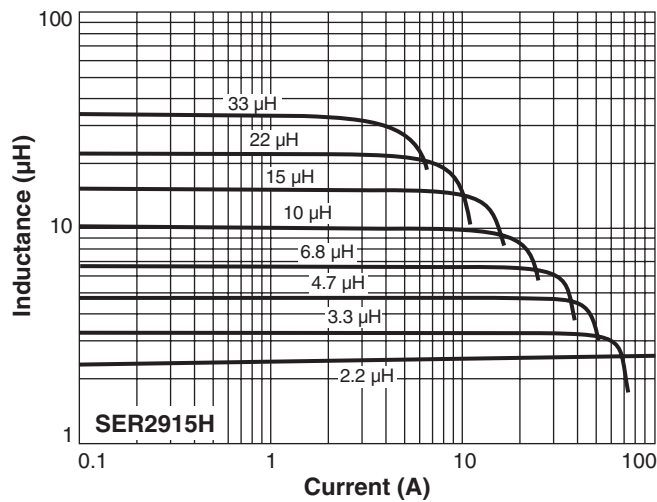
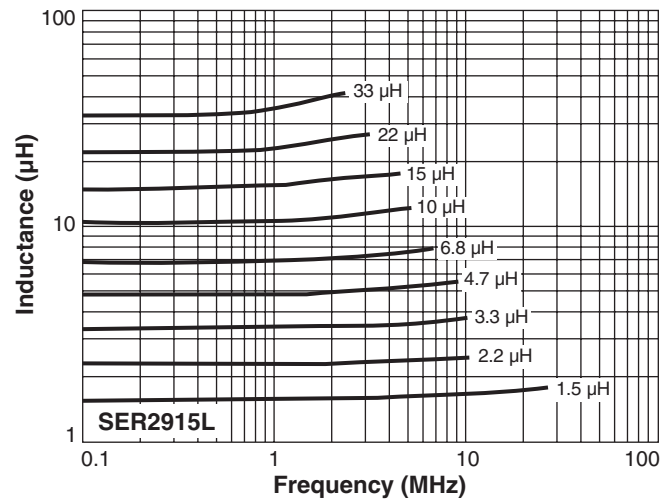
**NEW!**

# SMT Power Inductors - SER2900 Series

## L vs Current



## L vs Frequency



**Coilcraft**®

Specifications subject to change without notice.  
Please check our website for latest information.

Document 644-3 Revised 11/30/09

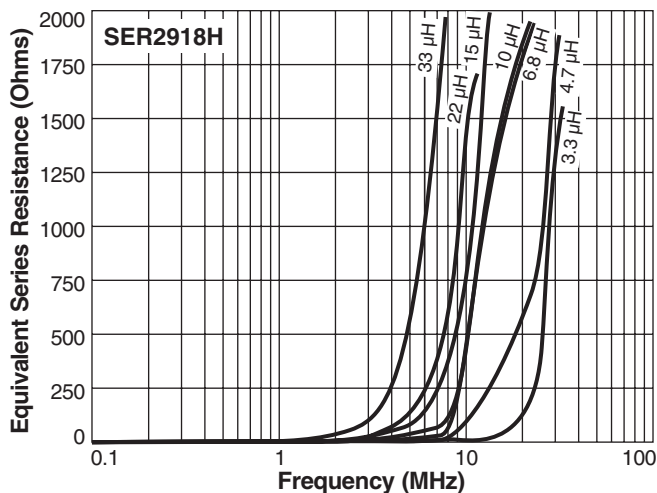
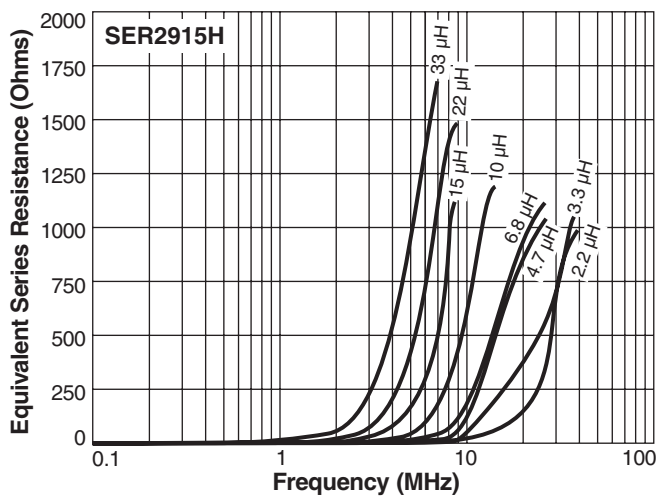
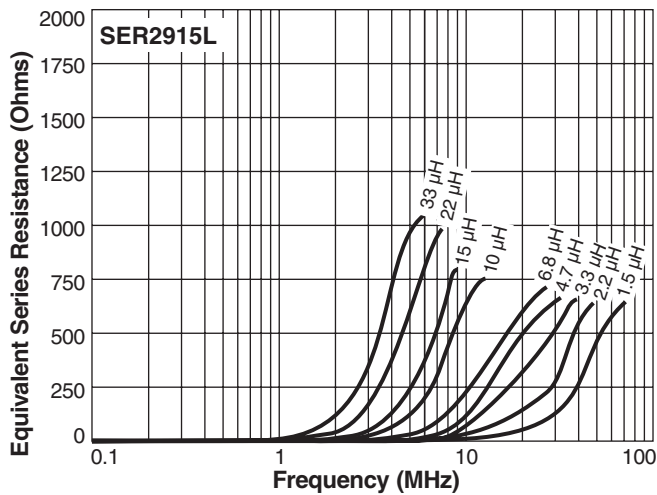
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>


**NEW!**

# SMT Power Inductors - SER2900 Series

## ESR vs Frequency



**Coilcraft®**

Specifications subject to change without notice.  
Please check our website for latest information.

Document 644-4 Revised 11/30/09

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

## 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](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9