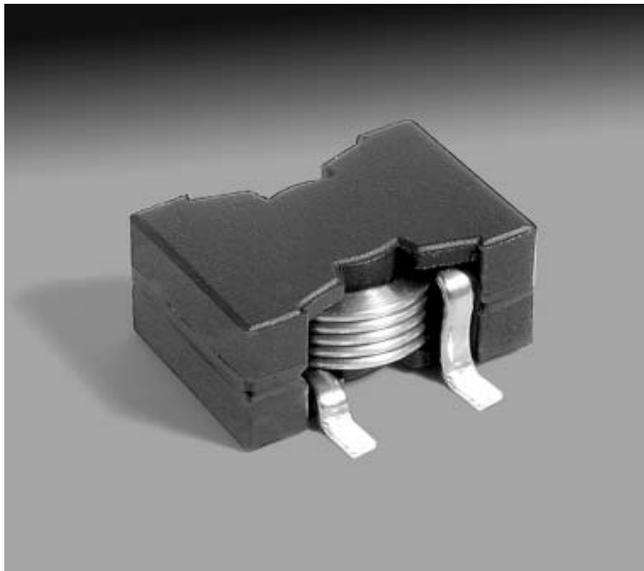


**PRELIMINARY**

# SMT Power Inductor - SER2310 Series



Coilcraft's SER2310 series of flat wire power inductors offers extremely low DC resistance and very high saturation current ratings (up to 50 Amps). The flat core allows for exceptional heat dissipation.

These self-leaded inductors have a third mounting leg to ensure positive board adhesion.

They are ideal for power supply applications where high current handling is essential and are perfect for low-voltage, high-current DC-DC converters. Custom inductance values are also possible.

Coilcraft **Designer's Kit C166** contains four samples each of the standard parts shown and four samples of each of our SER1590 high current inductors. Contact Coilcraft, or order on-line at <http://order.coilcraft.com>.

| Part number <sup>1</sup> | Inductance <sup>2</sup><br>±20% (µH) | DCR max<br>(Ohms) | SRF typ <sup>3</sup><br>(MHz) | Isat <sup>4</sup><br>(A) | Irms <sup>5</sup><br>(A) |
|--------------------------|--------------------------------------|-------------------|-------------------------------|--------------------------|--------------------------|
| SER2310-301MX_           | 0.3                                  | 0.002             | 375                           | 50                       | 30                       |
| SER2310-701MX_           | 0.7                                  | 0.003             | 140                           | 40                       | 28                       |
| SER2310-132MX_           | 1.3                                  | 0.004             | 86                            | 30                       | 24                       |

1. Specify **packaging** code:

**SER2310-132MX D**

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

- Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc using Coilcraft SMD-D fixture in Agilent/HP 4284A impedance analyzer.
- SRF measured using Agilent/HP 8753D network analyzer and Coilcraft SMD-D test fixture.
- DC current at which the inductance drops 10% (typ) from its value without current.
- Average current for a 40°C rise above 25°C ambient.
- Operating temperature range -40°C to +85°C.
- Electrical specifications at 25°C.

See Qualification Standards section for environmental and test data.

Specifications subject to change without notice. Document 323-1 Revised 03/07/03

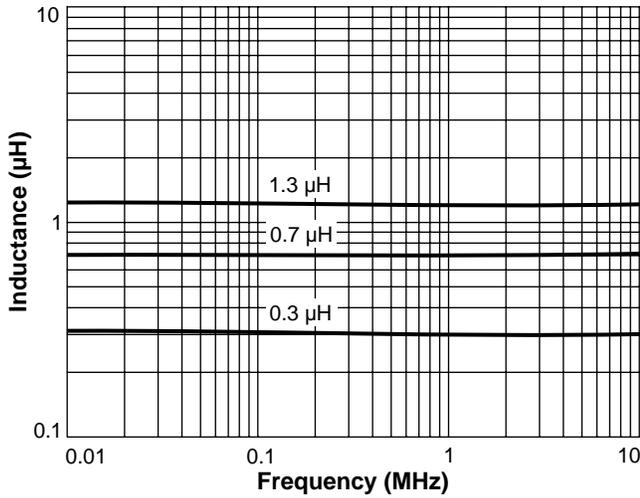
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

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

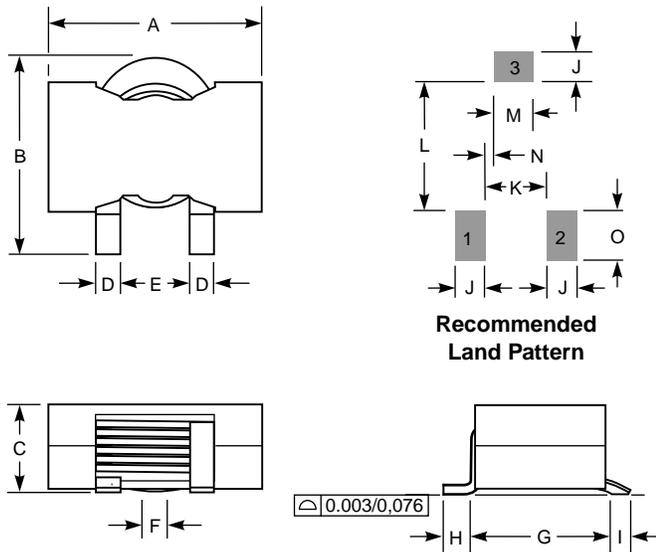
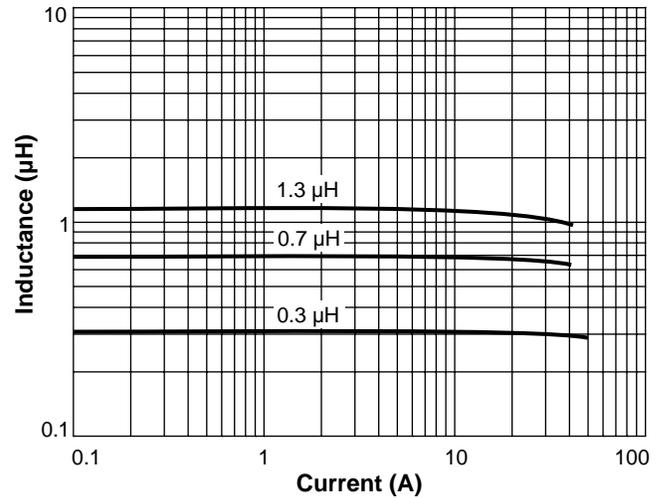
**PRELIMINARY**

# SMT Power Inductor - SER2310 Series

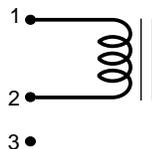
## Typical L vs Frequency



## Typical L vs Current



| A max | B max | C max | D     | E     | F     | G     |       |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.906 | 0.846 | 0.394 | 0.098 | 0.260 | 0.100 | 0.610 |       |
| 23,00 | 21,50 | 10,00 | 2,50  | 6,60  | 2,54  | 15,49 |       |
| H     | I     | J     | K     | L     | M     | N     | O     |
| 0.118 | 0.098 | 0.148 | 0.206 | 0.526 | 0.168 | 0.019 | 0.235 |
| 3,00  | 2,50  | 3,77  | 5,23  | 13,35 | 4,27  | 0,48  | 5,98  |



Terminal 3 is for mounting stability only.  
Do not connect to ground or other circuits.

**Coilcraft®**

Specifications subject to change without notice. Document 323-2 Revised 03/19/03

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