# SER2900 Series High Current Shielded Power Inductors

RoHS COMPLIANT

AEC Q200 +85°C

- **Improved version of the SER2800** series with a third mounting pad for **greater stability** and **board adhesion**
- Designed for **high current**, **low voltage** power supplies
- Saturation **current ratings** over **100 Amps**
- Flat wire windings provide **exceptionally low DC resistance**
- AEC-Q200 Grade 3 (−40°C to +85°C)
- **RoHS-compliant.** 260°C compatible. Tin-silver over copper terminations (leads); Gold over nickel over phos bronze (base pad)

Photo Pricing PDF data sheet

## SPECIFICATIONS

L vs Frequency ■ L vs Current ■ Core loss ■ ESR vs Frequency

Temperature vs Current Dimensions 3D models

| Part number *Click to get parts* | L ±10%[1] (µH) | DCR(mOhms)[2] | | SRF typ[3] (MHz) | Isat (A)[4] | | | Irms (A)[5] | |
|---|---|---|---|---|---|---|---|---|---|
| | | nom | max | | 10% drop | 20% drop | 30% drop | 20°C rise | 40°C 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 |

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|---|---|---|---|---|---|---|---|---|---|
| **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 Inductance measured at 500 kHz, 0.1 Vrms, using an Agilent/HP 4284A LCR meter or equivalent.

2 DCR measured at 25°C on a Keithley 580 micro-ohmmeter or equivalent.For other operating temperatures, use this DCR at Temperature calculator.

3 SRF measured using an Agilent/HP 4395A network analyzer and an Agilent/HP 16092A test fixture. Details

4 Isat: DC current at 25°C that causes the specified inductance drop from its value without current. Temperature derating curves.

5 Irms: Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. Temperature derating curves. When Irms is greater than Isat, Isat is the more critical specification and Irms is shown in gray type. See temperature rise vs Current.

6 **Ambient temperature range:** −40°C to +85°C with (40°C rise) Irms Derating curves

7 **Storage temperature range:** Component: −40°C to +125°C
Packaging trays: −40°C to +80°C

8 **Resistance to soldering heat:** Three reflows at >217°C for 90 seconds (+260°C ±5°C for 20 – 40 seconds), allowing parts to cool to room temperature between.

9 Electrical specifications at 25°C.

Refer to Soldering Coilcraft Components before soldering.

**PCB washing:** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. More info.

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