



# Shielded Power Inductors - SER2900



- 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

Core and winding loss See www.coilcraft.com/coreloss

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-28.5g; SER2915H-29.7g; SER2918H-35.7 g **Ambient temperature** −40°C to +85°C with (40°C rise) Irms current. Maximum part temperature +125°C (ambient + temp rise). Derating. 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 25 pieces per tray

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787\_PCB\_Washing.pdf.

	Inductance <sup>2</sup>			SRF	Isat (A)⁵			Irms (A) <sup>6</sup>	
Part number <sup>1</sup>	±10% (µH)	(mOl	hms) max	typ <sup>4</sup> (MHz)	10% drop	20% drop	30% drop	20°C rise	40°C rise
SER2915L-152KI	_ 1.5	1.50	1.65	60	100	>100	>100	20	30
SER2915H-222K	L 2.2	1.86	2.05	40	100	>100	>100	20	30
SER2915L-222KI	2.2	1.50	1.65	50	82.0	84.0	84.8	20	30
SER2918H-332K	L 3.3	2.60	2.86	40	91.0	92.5	93.6	20	28
SER2915H-332K	L 3.3	1.86	2.05	30	62.0	66.9	68.4	20	30
SER2915L-332KI	_ 3.3	1.50	1.65	40	48.0	54.0	57.0	20	30
SER2918H-472K	L 4.7	2.60	2.86	30	59.0	61.2	62.4	20	28
SER2915H-472K	L 4.7	1.86	2.05	25	42.0	48.0	50.1	20	30
SER2915L-472KI	_ 4.7	1.50	1.65	30	33.0	36.9	39.0	20	30
SER2918H-682K	L 6.8	2.60	2.86	25	42.0	45.0	45.9	20	28
SER2915H-682K	L 6.8	1.86	2.05	20	30.0	34.5	36.2	20	30
SER2915L-682KI	_ 6.8	1.50	1.65	25	22.0	26.0	27.8	20	30
SER2918H-103K	L 10	2.60	2.86	20	28.0	31.2	32.1	20	28
SER2915H-103K	L 10	1.86	2.05	15	18.0	21.5	23.4	20	30
SER2915L-103KI	_ 10	1.50	1.65	20	13.0	16.2	17.6	20	30
SER2918H-153K	L 15	2.60	2.86	16	18.0	21.2	21.9	20	28
SER2915H-153K	L 15	1.86	2.05	12	11.5	14.0	15.2	20	30
SER2915L-153KI	_ 15	1.50	1.65	15	7.5	9.8	11.0	20	30
SER2918H-223K	L 22	2.60	2.86	15	12.0	14.0	15.0	20	28
SER2915H-223K	L 22	1.86	2.05	10	7.0	8.6	9.6	20	30
SER2915L-223KI	_ 22	1.50	1.65	10	4.5	6.0	6.8	20	30
SER2918H-333K	L 33	2.60	2.86	10	7.0	8.7	9.6	20	28
SER2915H-333K	L 33	1.86	2.05	8	4.0	5.1	5.9	20	30
SER2915L-333KI	_ 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 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or
- 3. DCR measured on a Keithley 580 microohmmeter or equivalent.
- 4. SRF measured using an Agilent/HP 4395A network analyzer and an Agilent/HP 16092A
- 5. DC current at 25°C that causes the specified inductance drop from its value without current. Click for temperature derating information. When Isat rating is less than Irms, Isat is the more critical specification.
- 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. When Irms is greater than Isat, Isat is the more critical specification, and Irms is shown in gray type. See Temperature Rise vs Current curve on next page.
- Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



Pad is for mounting stability only. Do not connect to ground

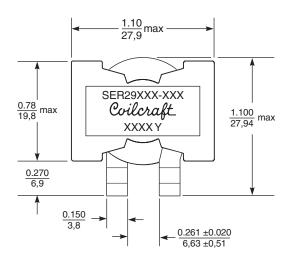
or other circuits.

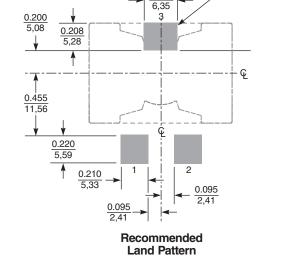


# **Shielded Power Inductors - SER2900 Series**





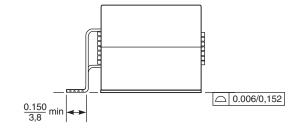




0.250

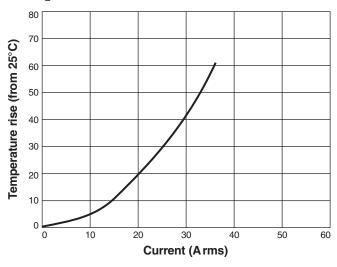


SER2915L 0.605 / 15,36 SER2915H 0.605 / 15,36 SER2918H 0.700 / 17,78



Dimensions are in inches

#### **Temperature Rise vs Current**





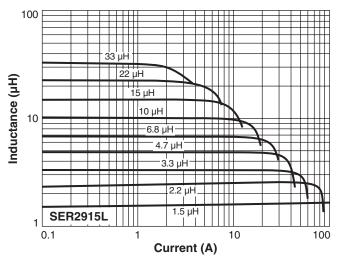


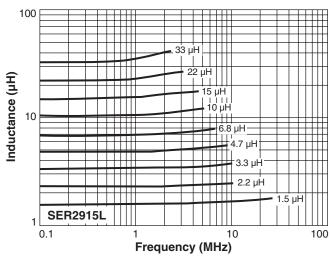
## **Shielded Power Inductors - SER2900 Series**

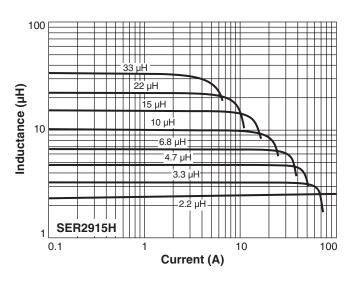
### L vs Current

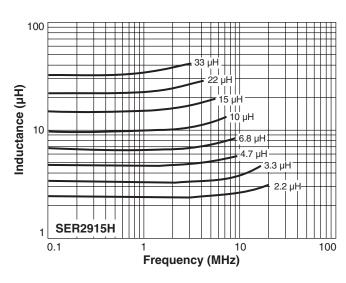
### L vs Frequency

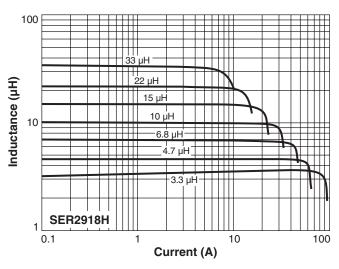


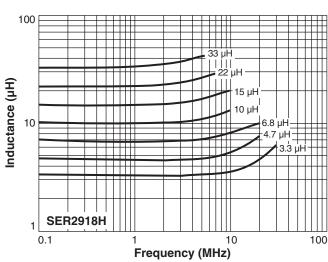














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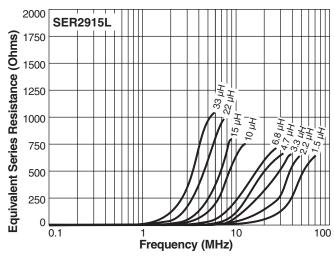
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This product may not be used in medical or high
risk applications without prior Coilcraft approval.
Specification subject to change without notice.
Please check web site for latest information.

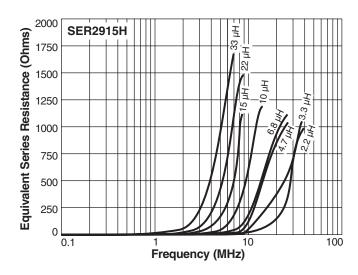


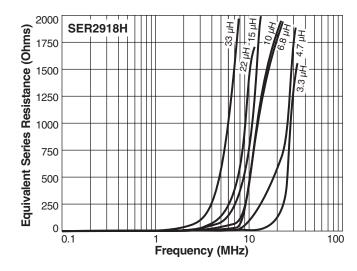
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### **ESR** vs Frequency











### **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

#### Coilcraft:

 SER2918H-223KL
 SER2915H-332KL
 SER2918H-472KL
 SER2915H-682KL
 SER2915H-153KL
 SER2915L-472KL

 SER2915L-332KL
 SER2918H-103KL
 SER2915H-333KL
 SER2918H-682KL
 SER2915L-153KL
 SER2915L-682KL

 SER2915H-103KL
 SER2915L-222KL
 SER2915L-223KL
 SER2915L-152KL
 SER2915H-222KL
 SER2918H-332KL

 SER2918H-333KL
 SER2918H-153KL
 SER2915H-472KL
 SER2915H-223KL
 SER2915L-103KL
 SER2915L-333KL