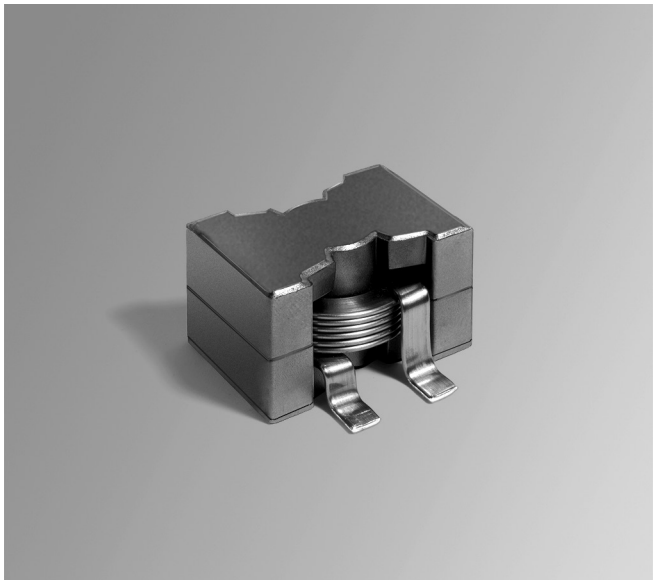
Shielded Power Inductors - SER2900



- 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–28.5 g; SER2915H–29.7 g; 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.

Part number[1]	Inductance[2] ±10% (µH)	DCR[3] (mOhms) nom	DCR[3] (mOhms) max	SRF typ[4] (MHz)	Isat (A)[5] 10% drop	Isat (A)[5] 20% drop	Isat (A)[5] 30% drop	Irms (A)[6] 20°C rise	Irms (A)[6] 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
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 Vrms, 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 4395A network analyzer and an Agilent/HP 16092A test fixture.
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.
7. Electrical specifications at 25°C.

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

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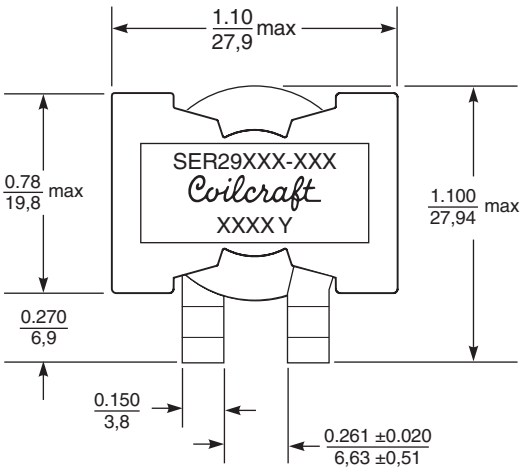
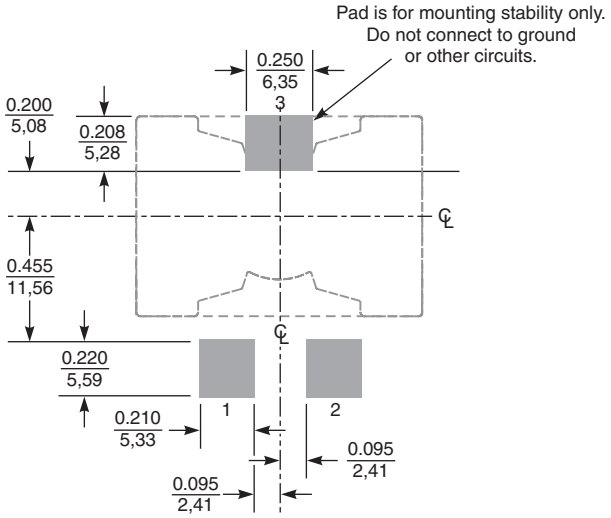
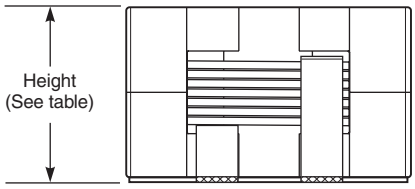
Shielded Power Inductors - SER2900 Series

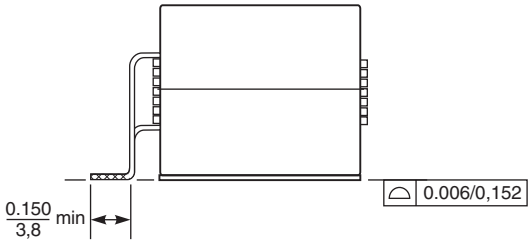




Recommended Land Pattern

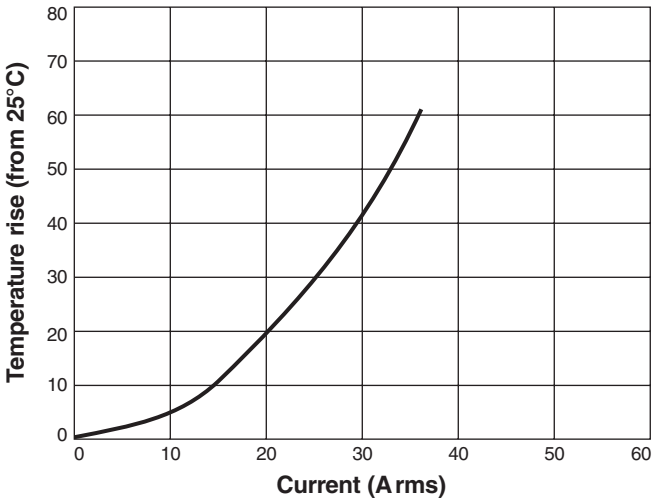


	Maximum height
SER2915L	0.605 / 15,36
SER2915H	0.605 / 15,36
SER2918H	0.700 / 17,78



Dimensions are in inches / mm

Temperature Rise vs Current



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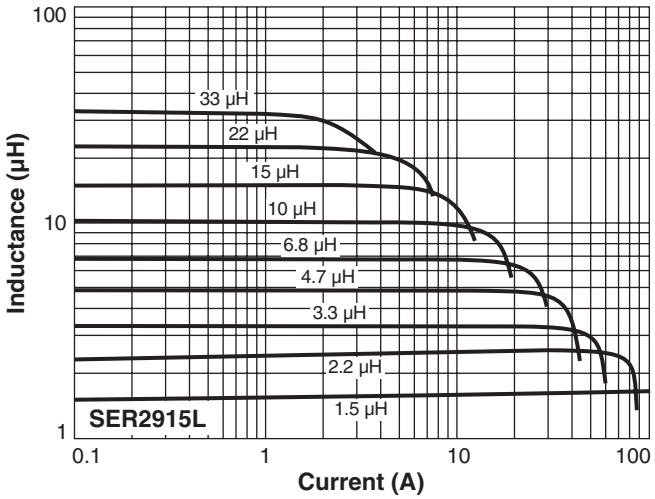
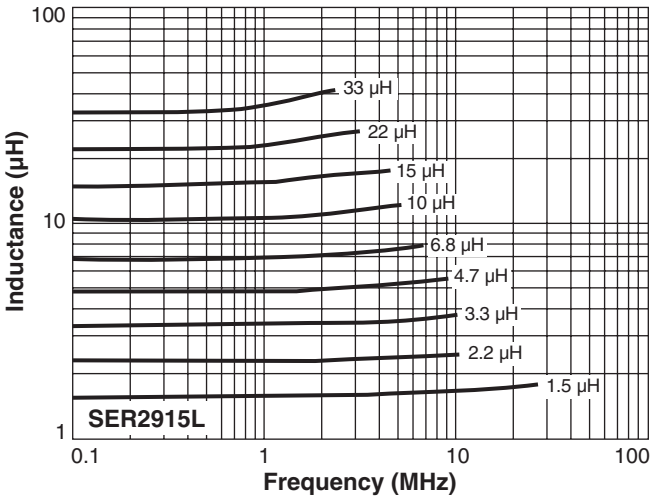
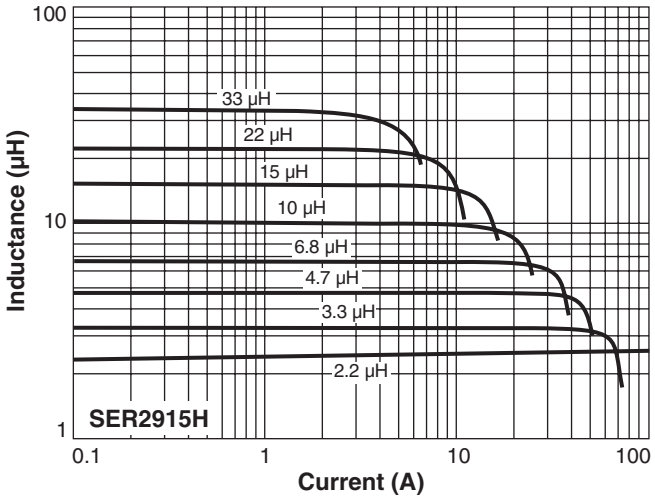
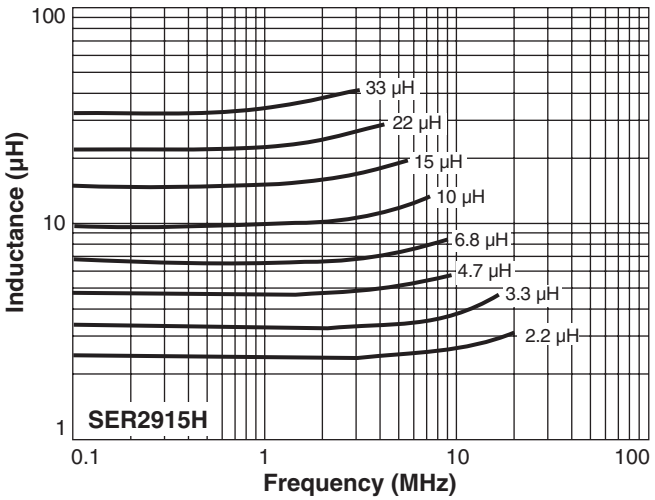
L vs Current

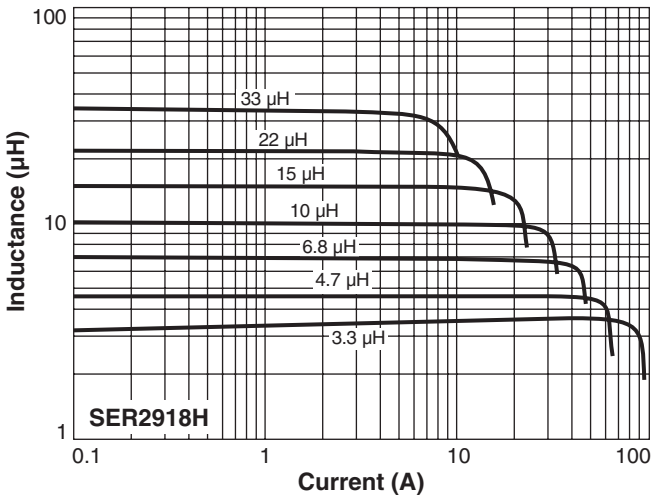


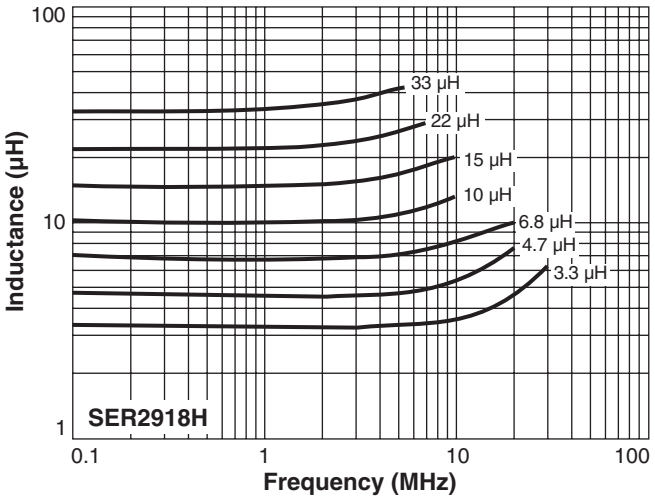
L vs Frequency











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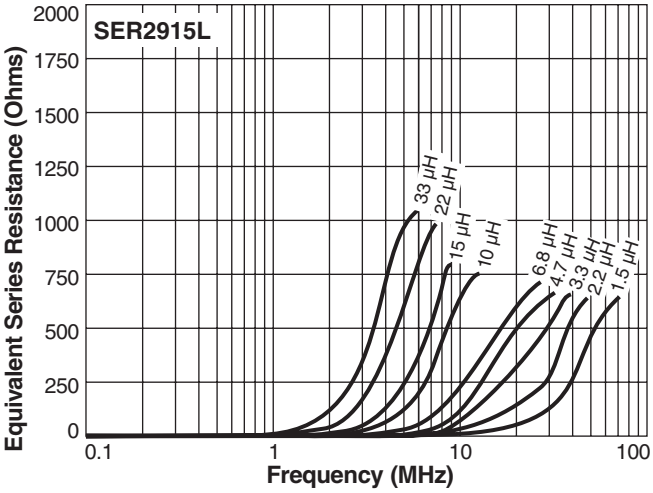
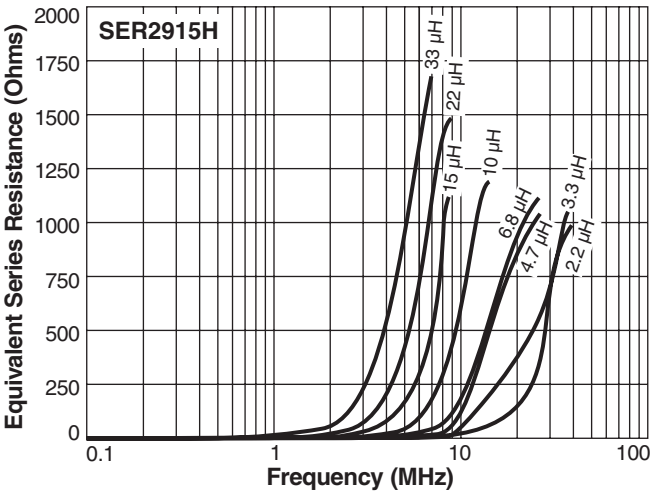
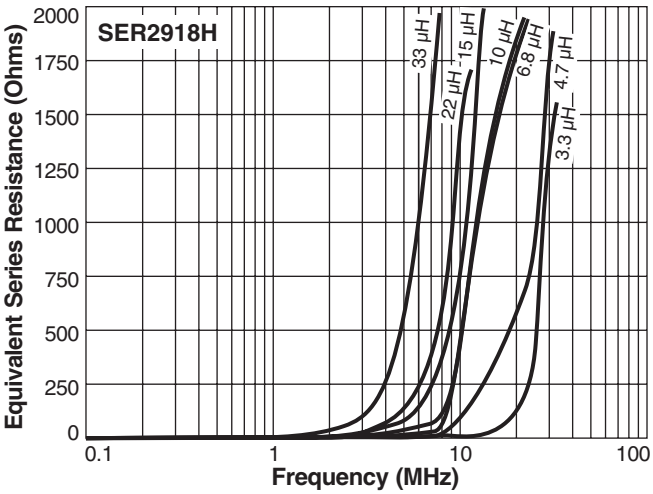
Shielded Power Inductors - SER2900 Series

ESR vs Frequency







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