

**NEW!**

SMT Power Inductors - SER2800 Series



Designed for high current, low voltage power supply applications, the SER2800 series provides unmatched electrical performance in an extremely robust package. It offers higher inductance values than our SER2000 series – 1.5 μH to 33 μH – with the same exceptional current handling capability and low DC resistance.

This series is available in three variations. The SER2814L has the lowest DCR for each inductance value. The SER2814H offers higher saturation current ratings in the same size part. The SER2817H provides the highest saturation current ratings in a slightly taller part.

Caution:

This series is not intended for use in high vibration or mechanical shock environments. We advise using additional means of securing the part to the circuit board to ensure its adhesion. For more information, contact Coilcraft at cust_service@coilcraft.com.

Part number	Inductance ¹ $\pm 10\%$ (μH)	DCR ² $\pm 5\%$ (mOhms)	SRF typ ³ (MHz)	Isat ⁴ (A)	Irms ⁵ (A)
SER2814L-152KL	1.5	1.2	60	100	30.0
SER2814H-222KL	2.2	1.6	40	100	30.0
SER2814L-222KL	2.2	1.2	50	82	30.0
SER2817H-332KL	3.3	2.3	40	91	28.0
SER2814H-332KL	3.3	1.6	30	62	30.0
SER2814L-332KL	3.3	1.2	40	48	30.0
SER2817H-472KL	4.7	2.3	30	59	28.0
SER2814H-472KL	4.7	1.6	25	42	30.0
SER2814L-472KL	4.7	1.2	30	33	30.0
SER2817H-682KL	6.8	2.3	25	42	28.0
SER2814H-682KL	6.8	1.6	20	30	30.0
SER2814L-682KL	6.8	1.2	25	22	30.0
SER2817H-103KL	10.0	2.3	20	28	28.0
SER2814H-103KL	10.0	1.6	15	18	30.0
SER2814L-103KL	10.0	1.2	20	13	30.0
SER2817H-153KL	15.0	2.3	16	18	28.0
SER2814H-153KL	15.0	1.6	12	11.5	30.0
SER2814L-153KL	15.0	1.2	15	7.5	30.0
SER2817H-223KL	22.0	2.3	15	12.0	28.0
SER2814H-223KL	22.0	1.6	10	7.0	30.0
SER2814L-223KL	22.0	1.2	10	4.5	30.0
SER2817H-333KL	33.0	2.3	10	7.0	28.0
SER2814H-333KL	33.0	1.6	8	4.0	30.0
SER2814L-333KL	33.0	1.2	7	2.0	30.0

1. Inductance measured at 500 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent.
 2. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
 3. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
 4. DC current at which the inductance drops 10% (typ) from its value without current.
 5. Current that causes a 40°C temperature rise from 25°C ambient.
 6. Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data. Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Core material Ferrite

Terminations RoHS compliant tin-silver over copper. Other terminations available at additional cost.

Weight SER2814L – 27.5 g; SER2814H – 28.7 g; SER2817H – 34.7 g

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

Storage temperature Component: –40°C to +125°C. Packaging: –55°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)

Mean Time Between Failures (MTBF) 26,315,789 hours

Packaging 25 pieces per tray

PCB washing Only pure water or alcohol recommended

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Specifications subject to change without notice.

Please check our website for latest information. Document 490-1 Revised 09/19/07

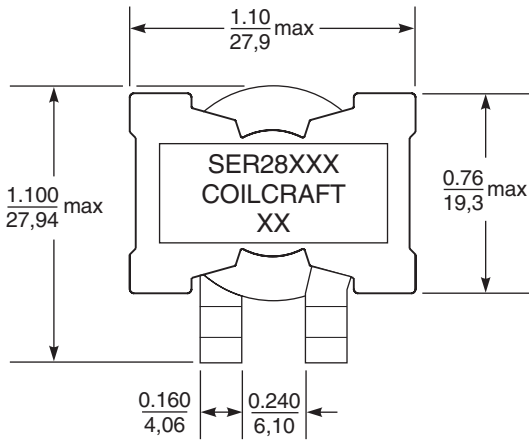
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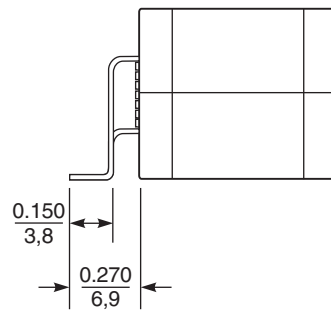
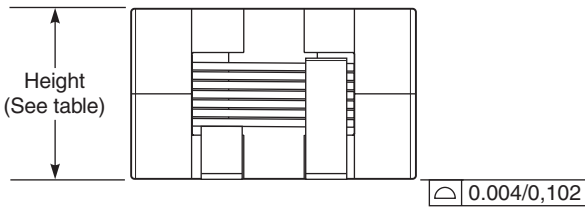
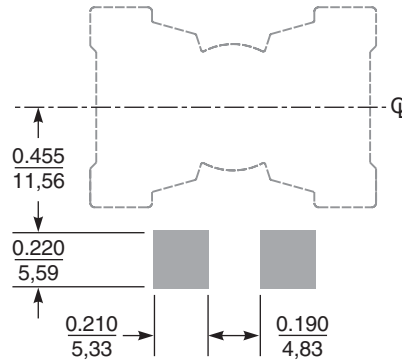


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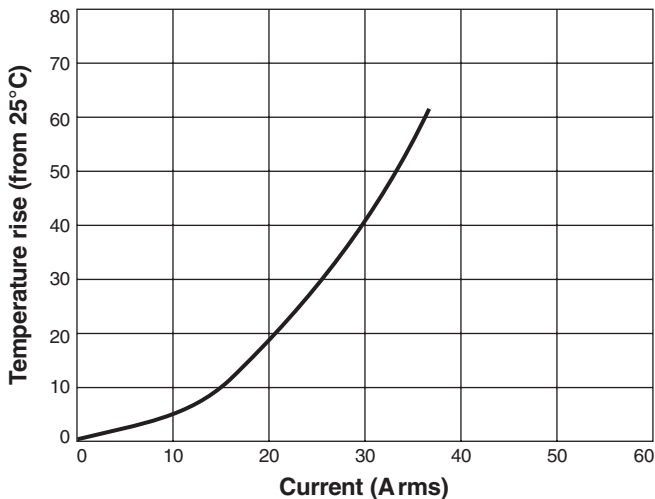
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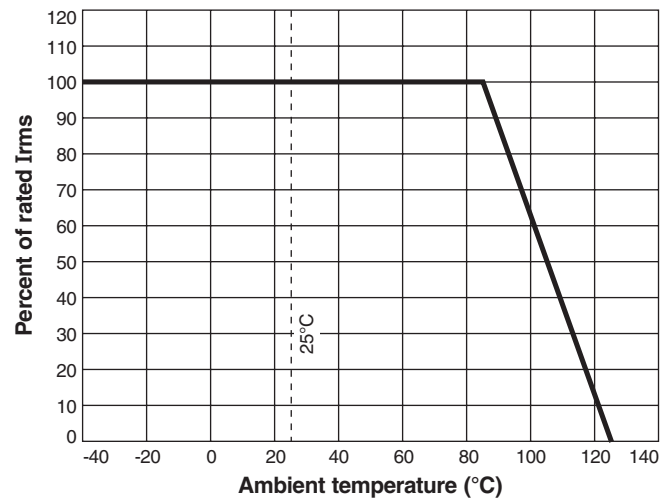
Maximum height

SER2814L	0.560 / 14,22
SER2814H	0.560 / 14,22
SER2817H	0.655 / 16,64

Temperature Rise vs Current



Irms Derating



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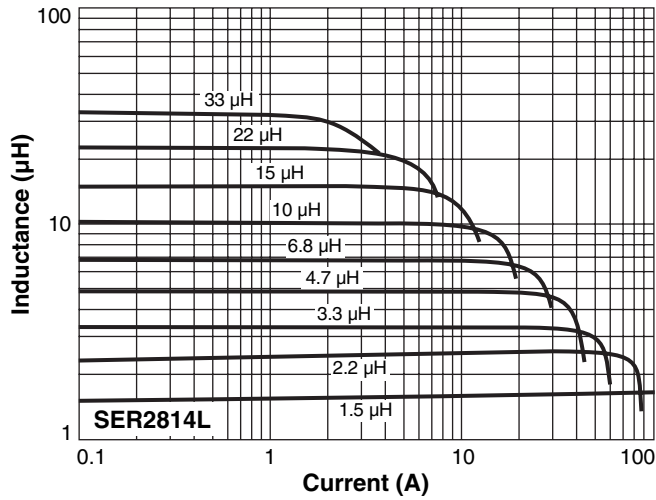
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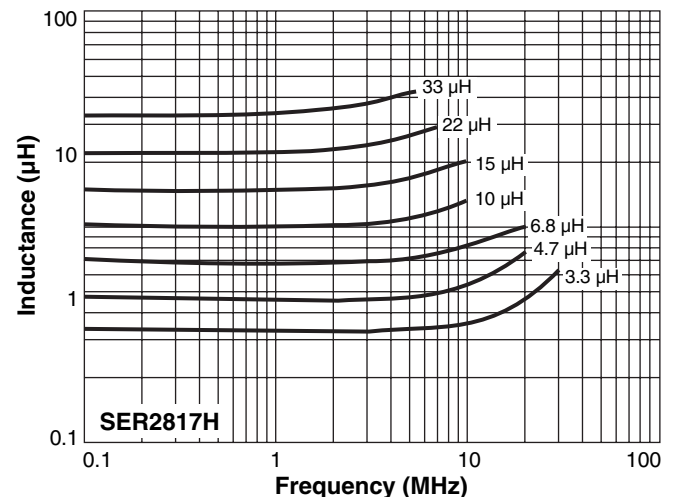
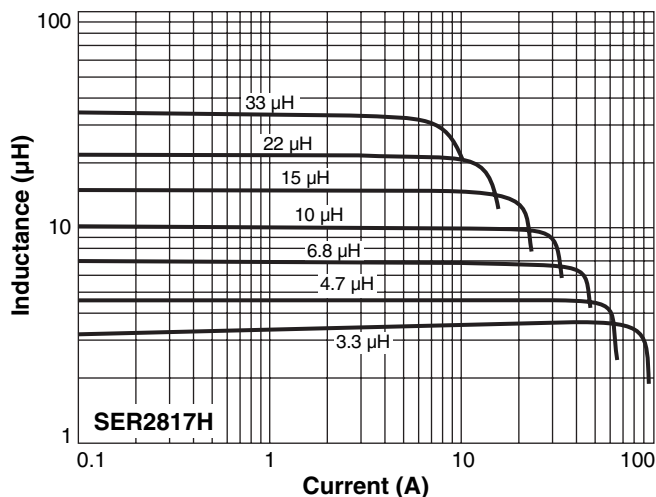
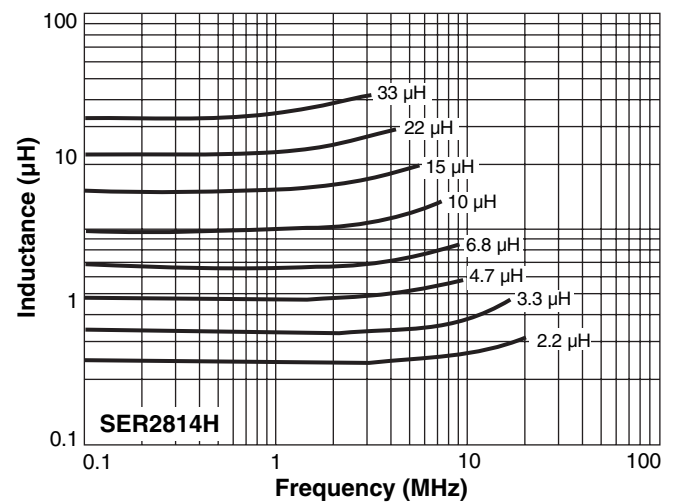
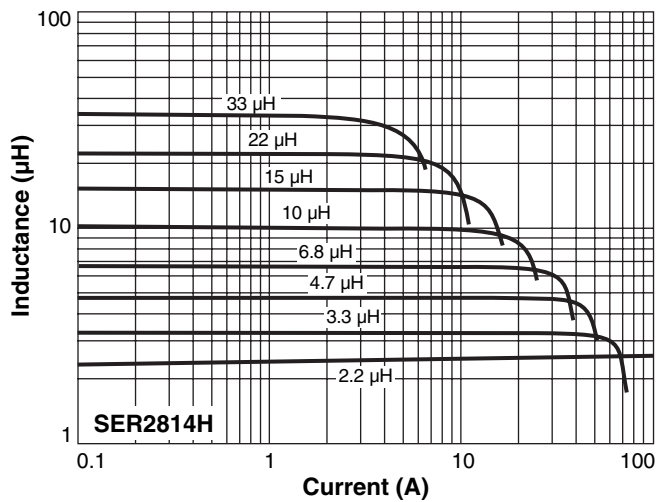
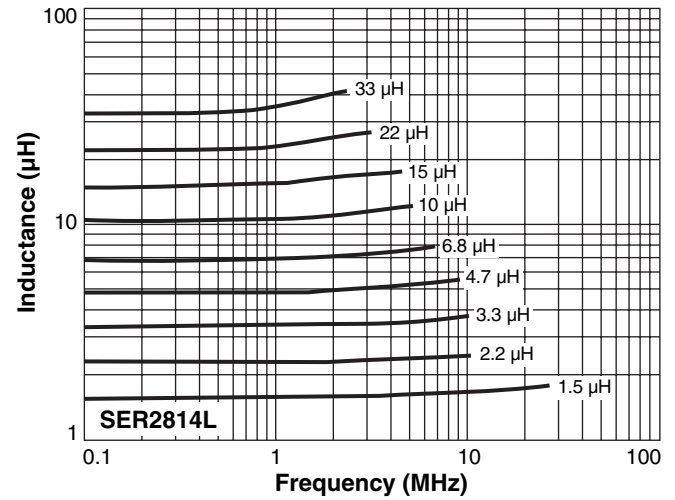
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L vs Current



L vs Frequency



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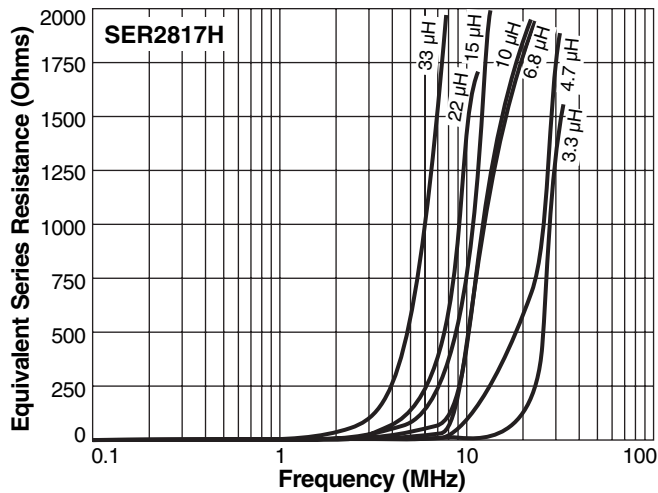
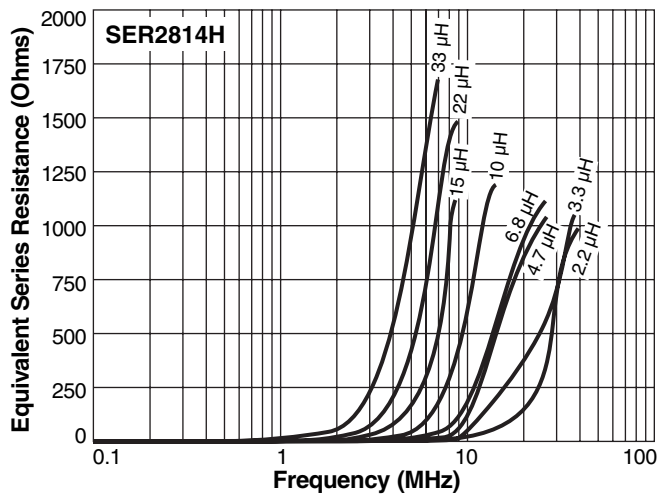
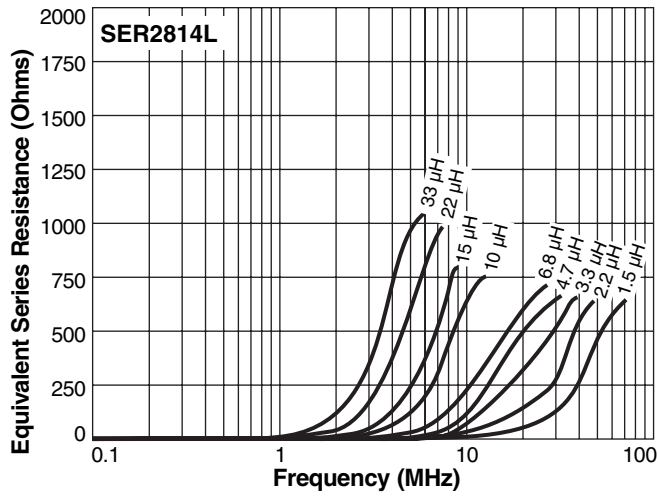
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ESR vs Frequency



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