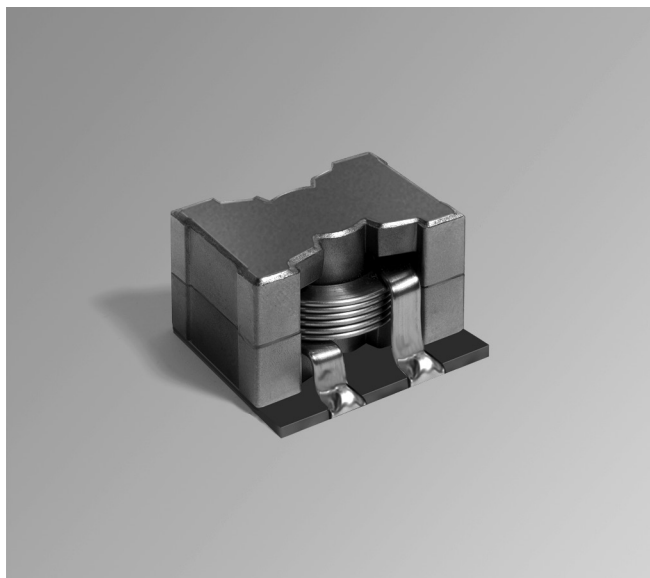




Shielded Power Inductors – SER3018H



- Same electrical specifications and land pattern as the SER2918H
- Mounting plate with three pads for excellent board adhesion
- Extremely low DCR; current handling up to 93.6 Amps

Core material Ferrite

Environmental RoHS compliant, halogen free

Terminations RoHS compliant matte tin over nickel over phos bronze. Other terminations available at additional cost.

Weight 36.2 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.
Tray 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 (mOhms) ³		SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
		nom	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
SER3018H-332KE	3.3	2.56	2.82	40	91.0	92.5	93.6	20	28
SER3018H-472KE	4.7	2.56	2.82	30	59.0	61.2	62.4	20	28
SER3018H-682KE	6.8	2.56	2.82	25	42.0	45.0	45.9	20	28
SER3018H-103KE	10	2.56	2.82	20	28.0	31.2	32.1	20	28
SER3018H-153KE	15	2.56	2.82	16	18.0	21.2	21.9	20	28
SER3018H-223KE	22	2.56	2.82	15	12.0	14.0	15.0	20	28
SER3018H-333KE	33	2.56	2.82	10	7.0	8.7	9.6	20	28

1. When ordering, please specify **termination** code:

SER3018H-333KE

Termination: E = Halogen free component. RoHS compliant matte tin over nickel over phos bronz.

Special order:

T = RoHS tin-silver-copper (95.5/4/0.5) or

S = non-RoHS tin-lead (63/37).

- Inductance measured at 500 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR meter or equivalent.
- DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
- SRF measured using an Agilent/HP 4395A network analyzer and an Agilent/HP 16193A test fixture.
- DC current at which the inductance drops the specified amount from its value without current.
- Current that causes the specified temperature rise from 25°C ambient.
- Electrical specifications at 25°C.

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



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US +1-847-639-6400 sales@coilcraft.com

UK +44-1236-730595 sales@coilcraft-europe.com

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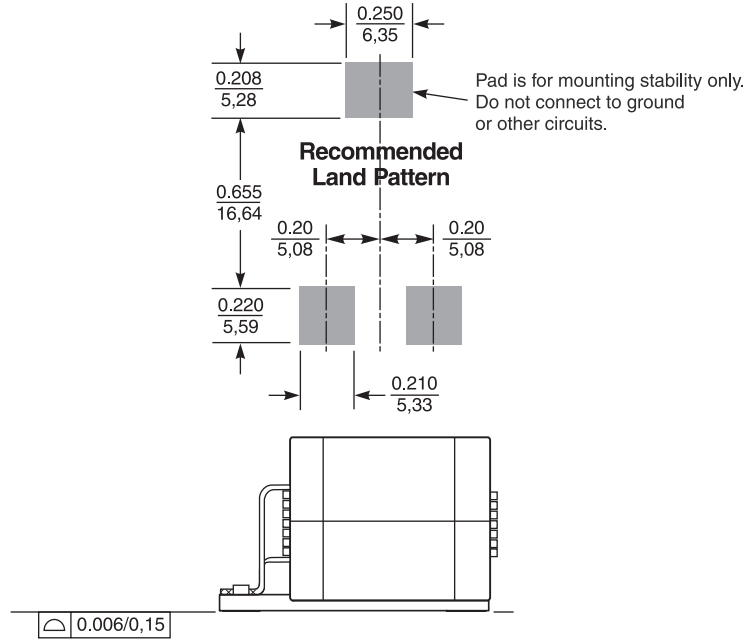
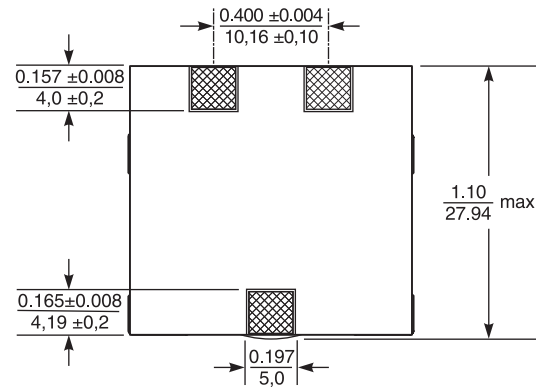
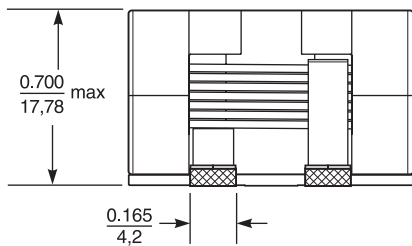
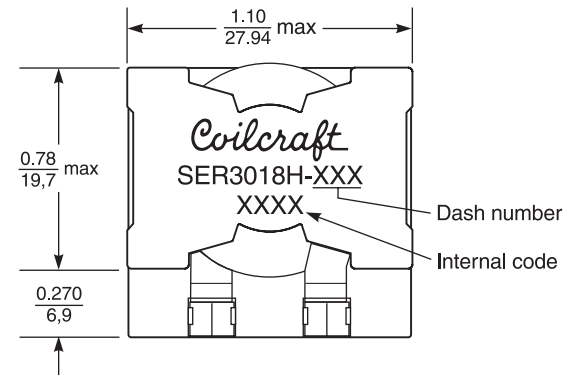
Document 874-1 Revised 11/24/14

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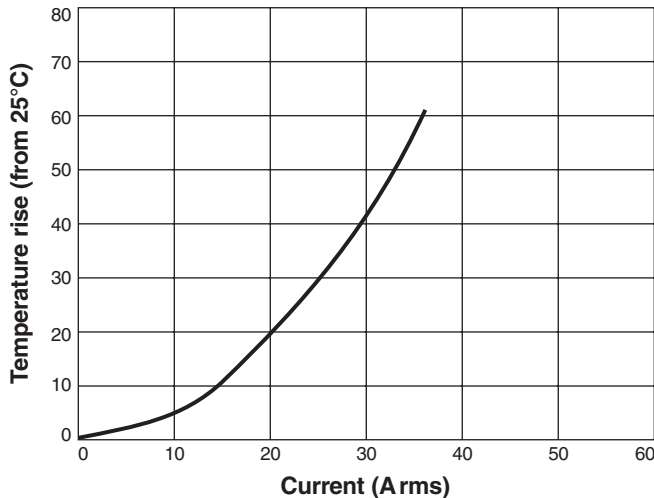


Shielded Power Inductors – SER3018H Series

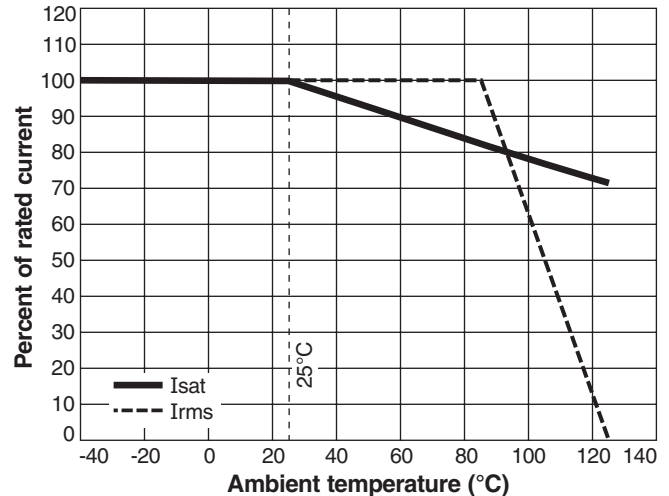


Dimensions are in inches mm

Temperature Rise vs Current



Current Derating



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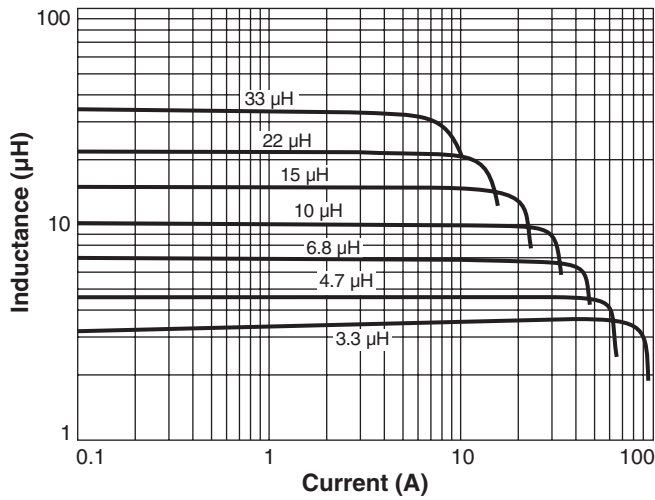
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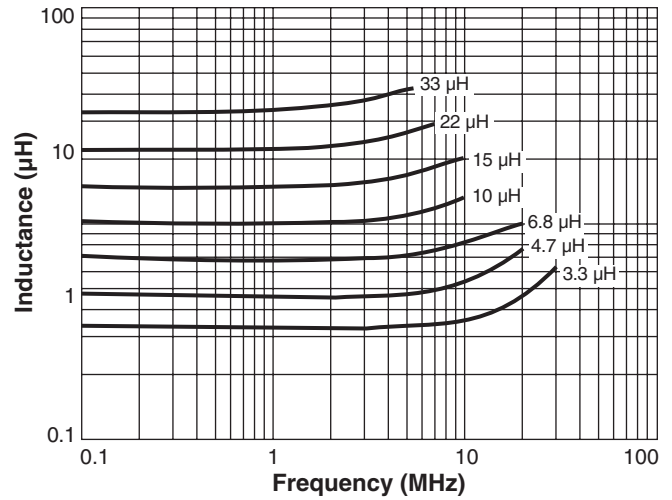


Shielded Power Inductors – SER3018H Series

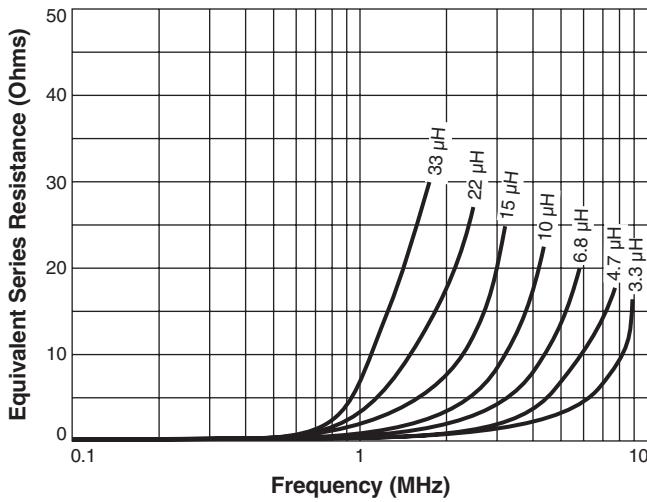
L vs Current



L vs Frequency



ESR vs Frequency



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China +86-21-6218 8074 sales@coilcraft.com.cn
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