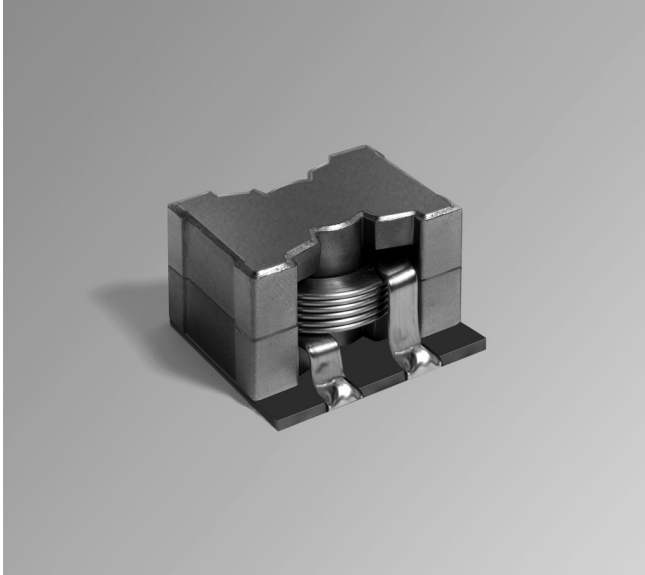




Shielded Power Inductors – SER3018H



- 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

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

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 (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 (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).

2. Inductance measured at 500 kHz, 0.1 Vrms, 0.1 A_{dc} 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 16193A test fixture.

5. DC current at 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information.](#)

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.](#)

7. Electrical specifications at 25°C.

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



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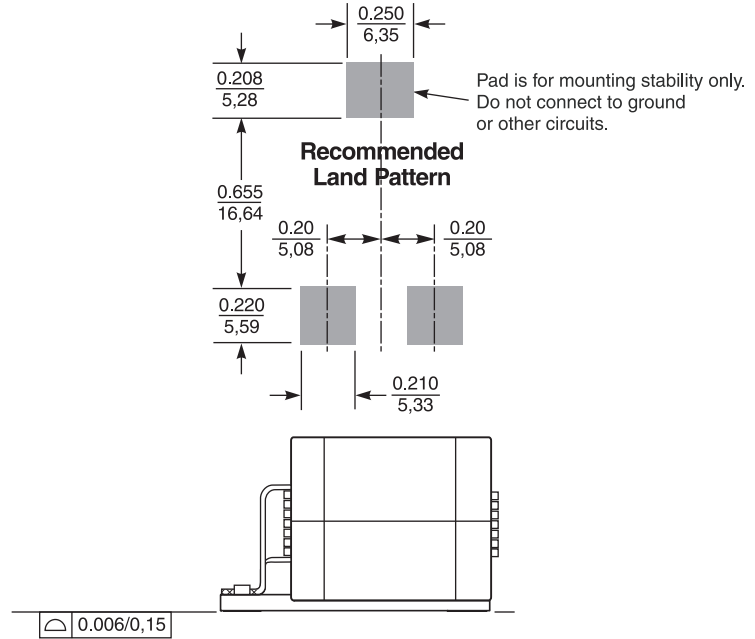
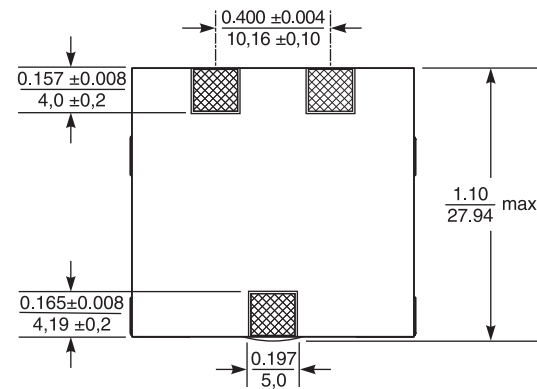
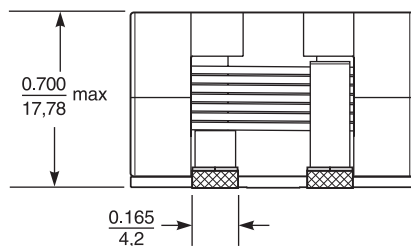
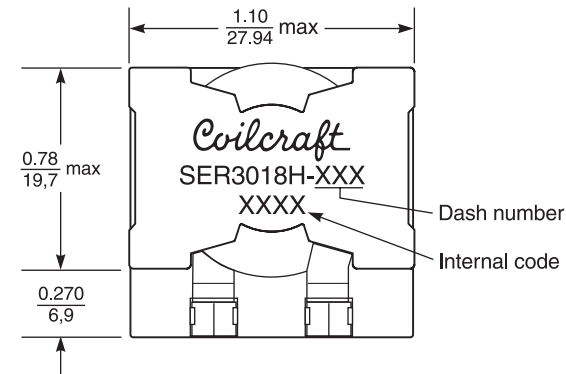
Document 874-1 Revised 09/10/15

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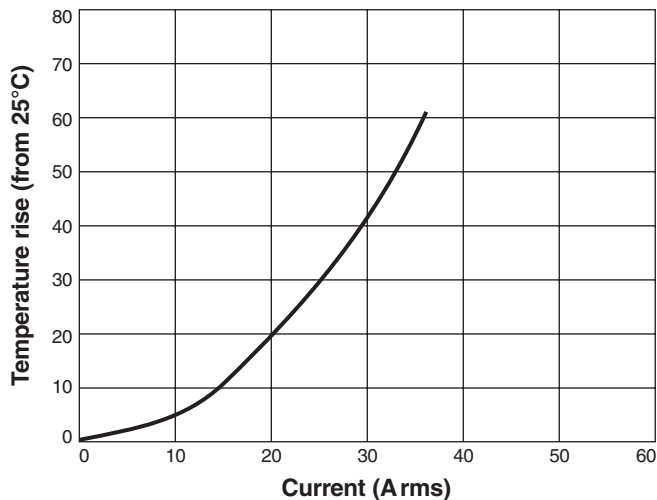


Shielded Power Inductors – SER3018H Series



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Temperature Rise vs Current



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Document 874-2 Revised 09/10/15

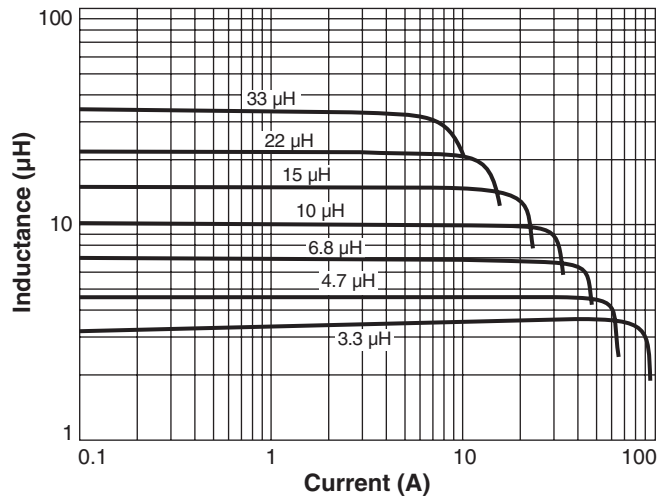
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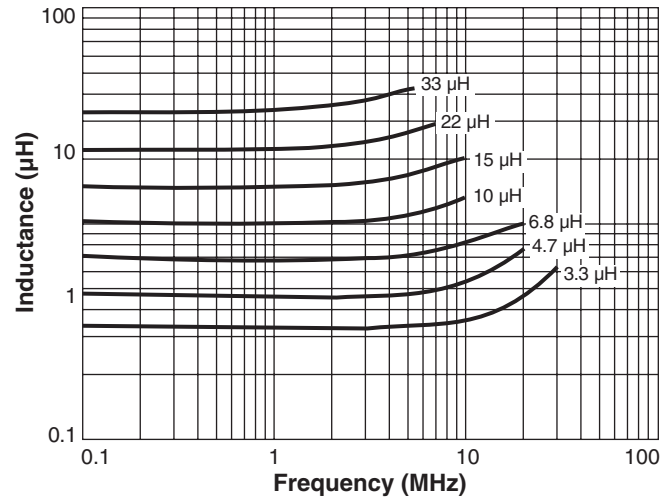


Shielded Power Inductors – SER3018H Series

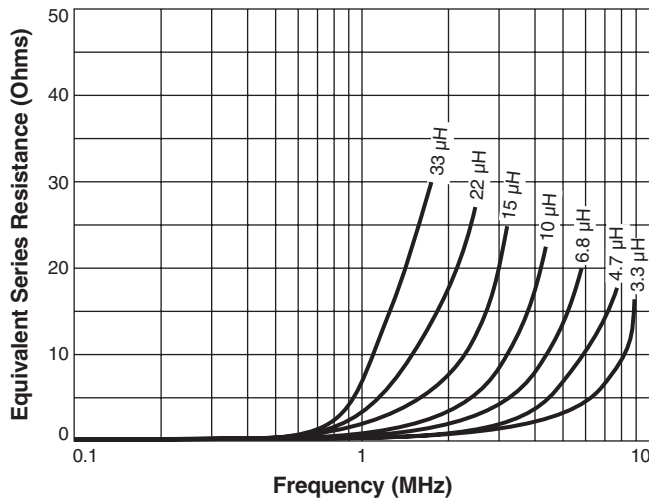
L vs Current



L vs Frequency



ESR vs Frequency



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