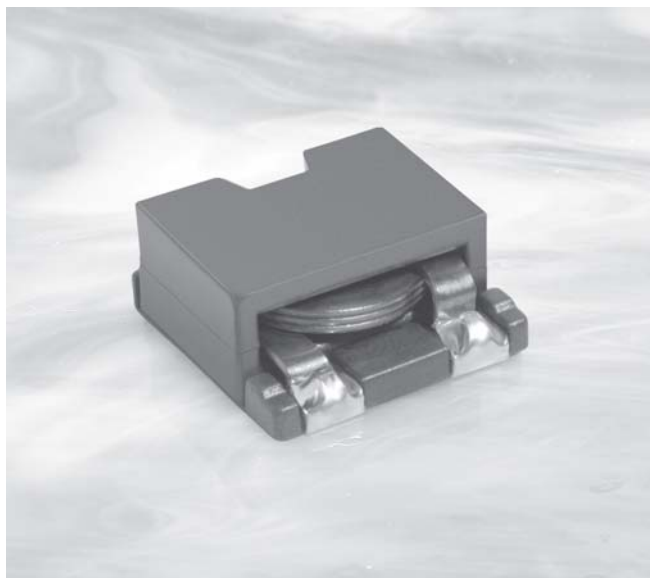




SMT Power Inductors - SER1360 Series



The SER1360 series provides exceptionally high current carrying capability (up to 43 Amps) and very low DC resistance, all in a low profile, small footprint package.

The part's magnetic shielding and 13 × 13 mm base allow high density mounting while the flat wire winding keeps the overall height to just 6 mm.

In addition to the standard values shown, custom values are available to meet specific applications.

Part number ¹	Inductance ² ±10% (µH)	DCR typ ³ (mOhm)	DCR max ³ (mOhm)	SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
					10% drop	20% drop	30% drop	20°C rise	40°C rise
SER1360-331KL	0.33	0.77	0.85	200	36	41	43	13.0	16.9
SER1360-651KL	0.65	0.77	0.85	160	23	27	28	13.0	16.9
SER1360-102KL	1.0	2.36	2.60	75	32	33	33.5	9.5	13.0
SER1360-182KL	1.8	2.36	2.60	50	17	19	20	9.5	13.0
SER1360-272KL	2.7	2.36	2.60	42	12	13	14	9.5	13.0
SER1360-402KL	4.0	5.50	6.05	34	11	12	13	7.1	9.4
SER1360-472KL	4.7	5.50	6.05	32	9.5	11	12	7.1	9.4
SER1360-602KL	6.0	5.50	6.05	28	8.0	9.0	9.5	7.1	9.4
SER1360-802KL	8.0	9.83	10.81	26	7.5	8.5	9.0	5.5	7.6
SER1360-103KL	10	9.83	10.81	24	6.2	7.0	7.5	4.4	7.2

1. When ordering, please specify **termination** and **packaging** codes:

SER1360-103KL D

Termination: **L** = RoHS compliant matte-tin over nickel over phos bronze.
Special order: **T** = RoHS tin-silver-copper (95.5/4/0.5)
or **S** = non-RoHS tin-lead (63/37).

Packaging: **D** = 13" machine-ready reel. EIA-481 embossed plastic tape (500 parts per full reel).

B = Less than full reel. In tape, but not machine ready.
To have a leader and trailer added (\$25 charge), use code letter D instead.

- Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A or equivalent.
 - DCR measured on a micro-ohmmeter.
 - SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.
 - DC current at which the inductance drops 10% (typ) from its value without current.
 - Current that causes a 40°C temperature rise from 25°C ambient.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Designer's Kit C365 contains 3 each of all values

Core material Ferrite

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

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

Weight 2.6 – 2.8 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: –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 500 per 13" reel; Plastic tape: 24 mm wide, 0.4 mm thick, 16 mm pocket spacing, 6.6 mm pocket depth

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 290-1 Revised 01/11/10

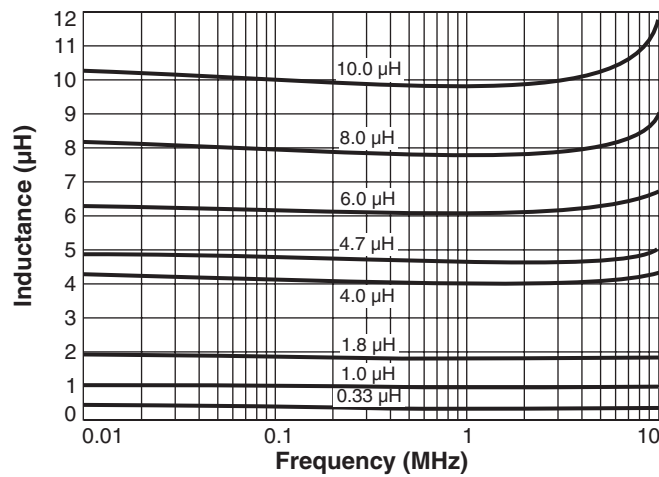
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

E-mail info@coilcraft.com Web <http://www.coilcraft.com>

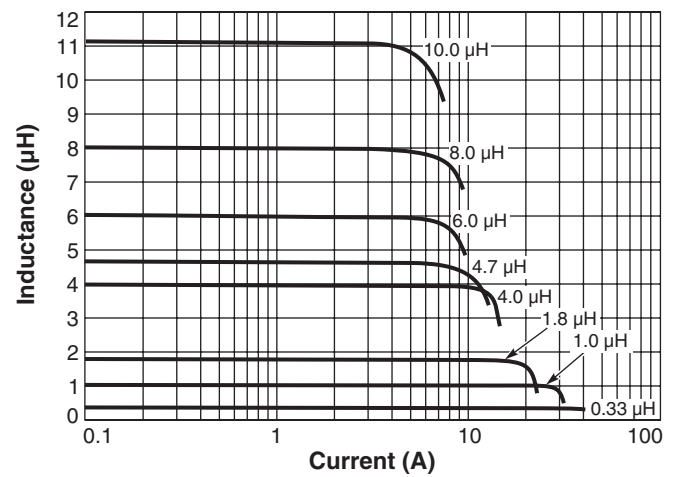


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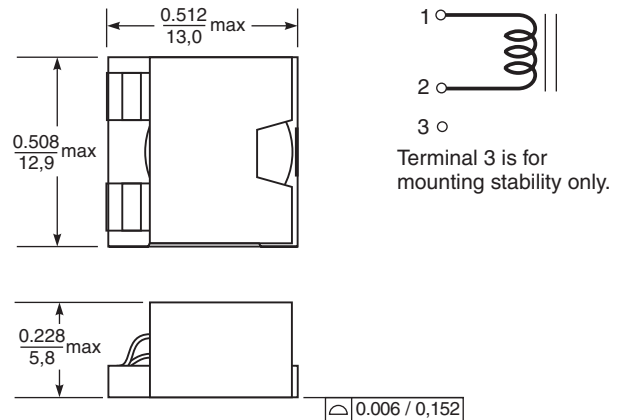
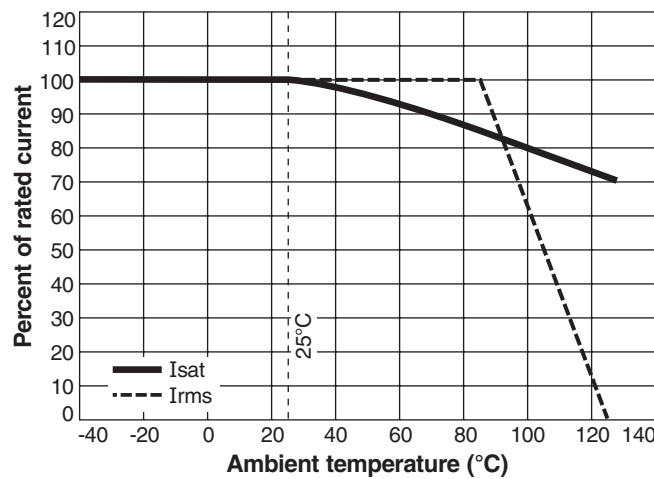
Typical L vs Frequency



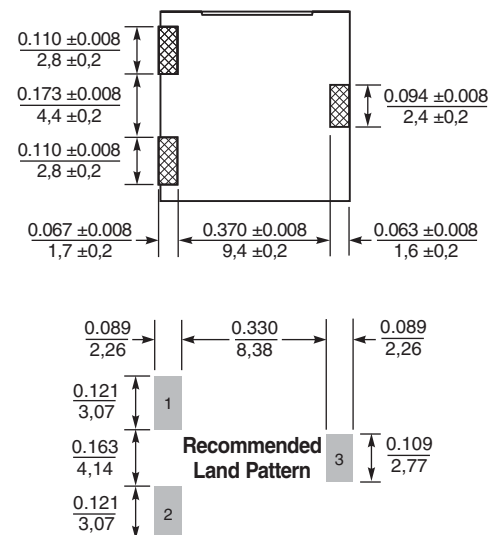
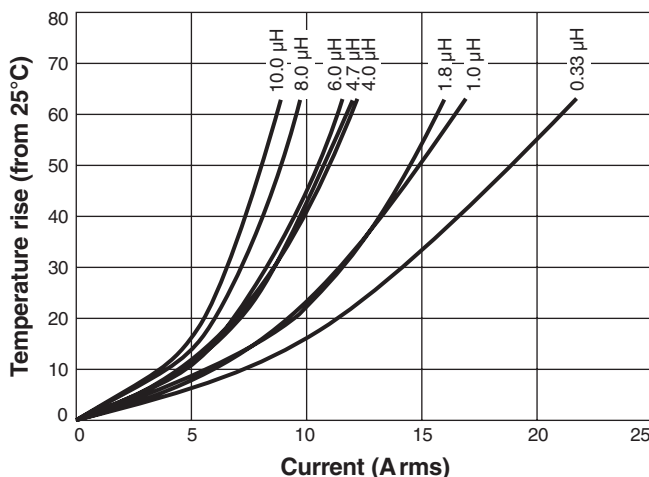
Typical L vs Current



Current Derating



Temperature Rise vs Current



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

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