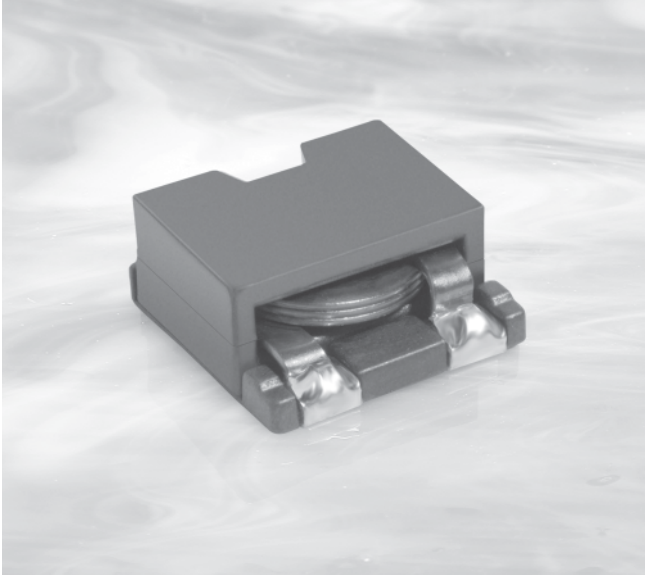




SMT Power Inductors - SER1360 Series



The SER1360 series provides exceptionally high current carrying capability (up to 48 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 show, 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	2.50	75	32	33	33.5	9.5	13.0
SER1360-182KL_	1.8	2.36	2.50	50	17	19	20	9.5	13.0
SER1360-272KL_	2.7	2.36	2.50	42	12	13	14	9.5	13.0
SER1360-402KL_	4.0	5.50	5.80	34	11	12	13	7.1	9.4
SER1360-472KL_	4.7	5.50	5.80	32	9.5	11	12	7.1	9.4
SER1360-602KL_	6.0	5.50	5.80	28	8.0	9.0	9.5	7.1	9.4
SER1360-802KL_	8.0	9.83	10.5	26	7.5	8.5	9.0	5.5	7.6
SER1360-103KL_	10	9.83	10.5	24	6.2	7.0	7.5	4.4	7.2

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

SER1360-103KL **L** **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.

See Qualification Standards section for environmental and test data. 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 compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.

Weight 2.6 – 2.8 g

Ambient temperature –40°C to +85°C with I_{rms} 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 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

Coilcraft®

Specifications subject to change without notice.
Please check our website for latest information.

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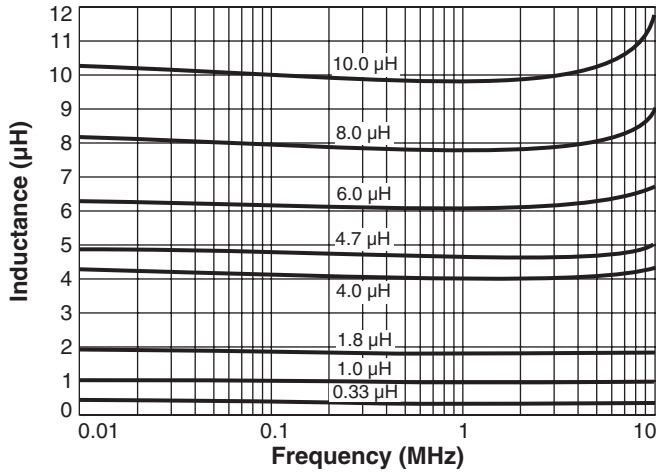
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

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

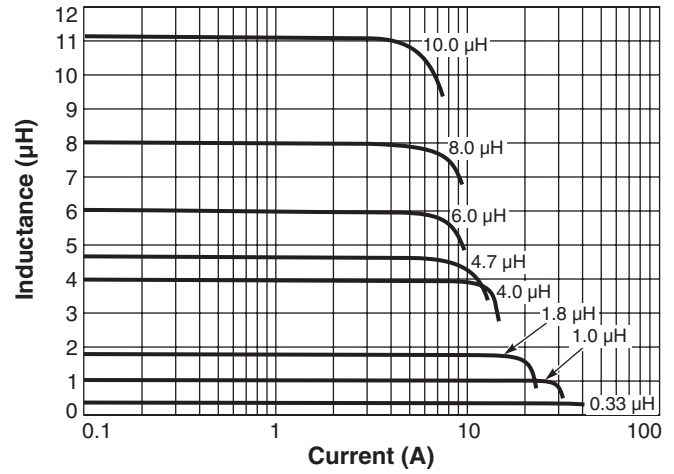


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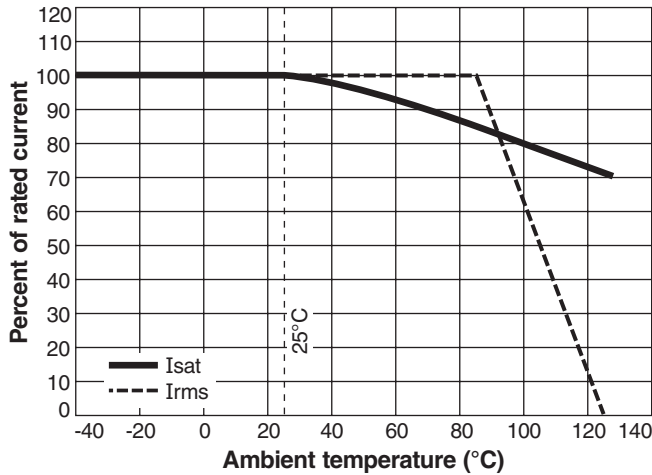
L vs Frequency



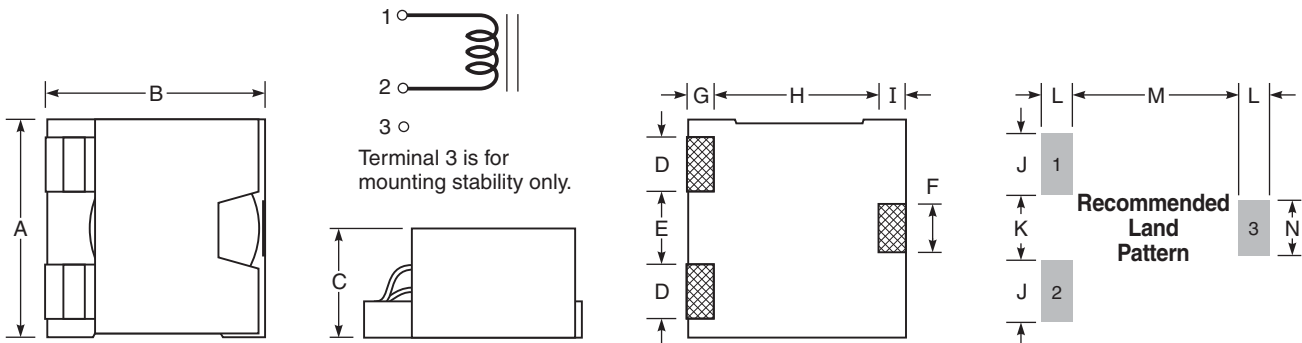
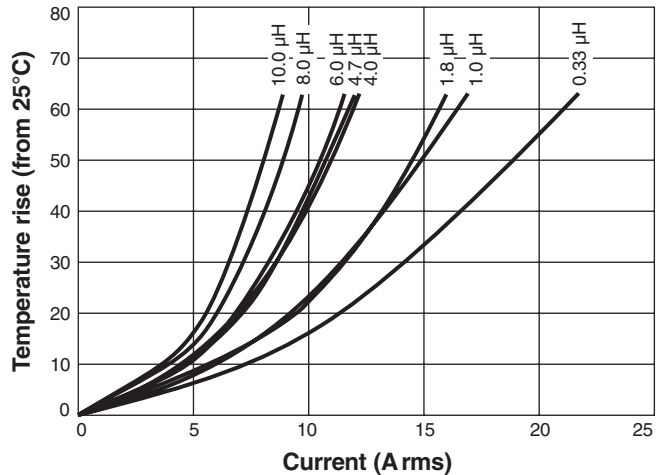
L vs Current



Current Derating



Temperature Rise vs Current



Dimensions are in inches
mm

A	B	C	D	E	F	G	H	I	J	K	L	M	N
max	max	max											
0.508	0.516	0.228	0.106±0.008	0.173±0.012	0.094±0.008	0.087±0.008	0.367±0.008	0.079±0.008	0.121	0.163	0.089	0.355	0.109
12,9	13,1	5,8	2,7±0,2	4,4±0,3	2,4±0,2	2,2±0,2	9,3±0,2	2,0±0,2	3,07	4,14	2,26	9,0	2,77



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