

# SMT Power Inductor

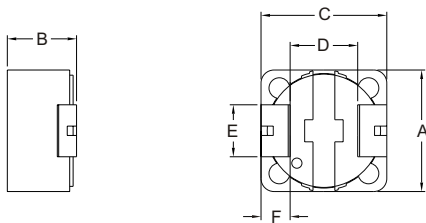
## SIQ1048 Type

### Features

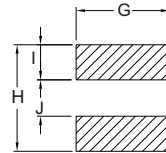
- Low profile (4.8mm max. height), high current(13.6A) SMD type.
- Magnetically shielded, suitable for high density mounting.
- High energy storage and low DCR.
- Provided with embossed carrier tape packing.
- Ideal for power source circuits, DC-DC converter, DC-AC inverters inductor application.
- In addition to the standard versions shown here, customized inductors are available to meet your exact requirements.



### Mechanical Dimension:



RECOMMENDED PAD

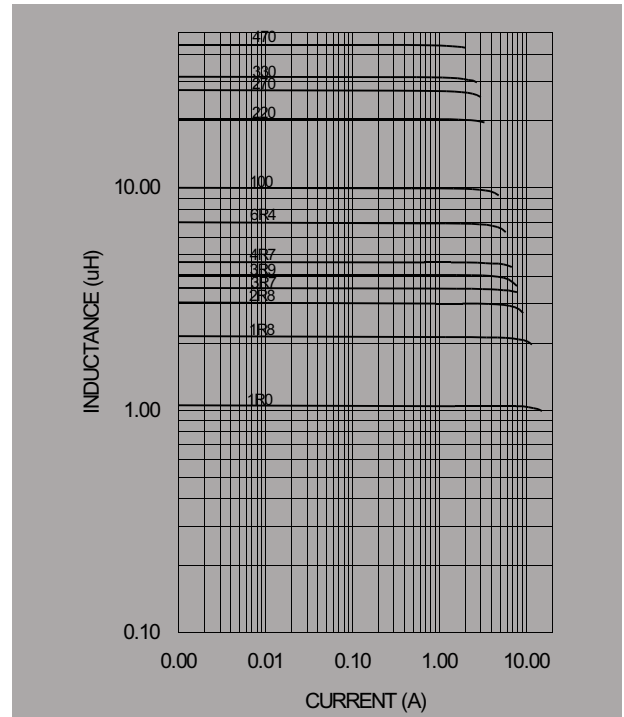


UNIT:mm/inch  
 A = 10.0±0.3/0.394±0.012  
 B = 4.8/0.189MAX.  
 C = 10.0±0.3/0.394±0.012  
 D = 6.4±0.3/0.252±0.012  
 E = 4.6±0.2/0.181±0.008  
 F = 1.7±0.2/0.067±0.008  
 G = 5.4/0.213  
 H = 10.8/0.425  
 I = 2.9/0.114  
 J = 5.0/0.197

### Electrical Characteristics: At 25°C: 100KHz, 0.1V

PART NO.	L (uH)	DCR (Ω) TYP.	Isat <sup>2</sup> (A <sup>2</sup> )	I <sub>rms</sub> <sup>3</sup> (A <sup>3</sup> )
SIQ1048-1R0	1.0	0.007	13.6	9.7
SIQ1048-1R8	1.8	0.011	10.4	9.5
SIQ1048-2R8	2.8	0.012	8.3	6.1
SIQ1048-3R7	3.7	0.016	7.0	5.3
SIQ1048-3R9	3.9	0.016	7.0	7.0
SIQ1048-4R7	4.7	0.0185	6.1	5.2
SIQ1048-6R4	6.4	0.028	5.2	4.8
SIQ1048-100	10	0.036	4.3	4.5
SIQ1048-220	22	0.078	3.0	3.0
SIQ1048-270	27	0.092	2.7	2.7
SIQ1048-330	33	0.105	2.4	2.4
SIQ1048-470	47	0.155	1.8	1.8

1. Tolerance of inductance  
 1.0~1.8uH±30% 2.8~470uH±20%
2. I<sub>rated</sub> is the DC current which cause the inductance drop 20% typical of its nominal inductance without current and the surface temperature of the part increase less than 45°C.
3. Operating temperature : -20°C to 105°C (including self-temperature rise).



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