



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

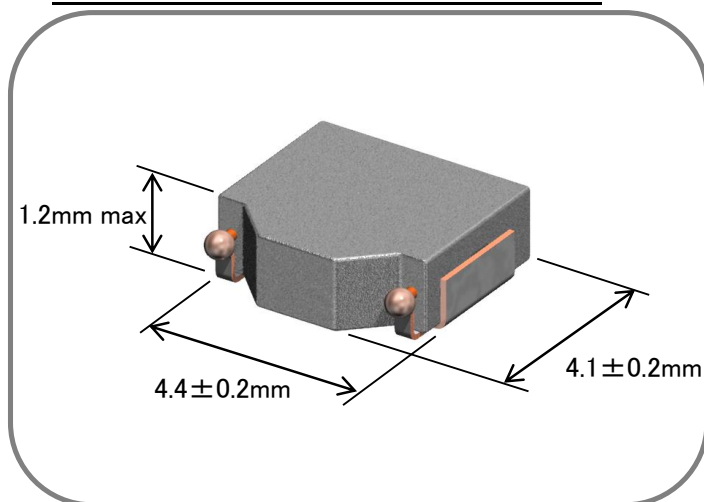
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### Component Image & Dimension



### Features

- a) Small Footprint and Low Profile Design :  
Footprint : 4.4 x 4.1 mm Typ.  
Height : 1.2mm Max.
- b) High Power Handling Capability :  
Small Copper Loss  
Using Large Saturation Induction of Fe- based metals
- c) Wide Range Operating Temperature due to High Curie Temperature of metal core
- d) Automatic Mounting in Tape&Reel Package.

### Applications

Note Book & Mobile Computer, VRM,  
Cellular Phone, HDD etc.

### Electrical Specification

TDK Identification	Inductance		Test Freq. (kHz)	DC Resistance		Rated DC Current		
	at 0A (uH)	Tol. (%)		Spec. (m-Ohm)	Typ. (m-Ohm)	Idc 1 (A) max.	Idc 1 (A) typ.	Idc 2 (A) typ.
SPM4012T- R47M-CA	0.47	+/-20%	100	25 max	23	6.0	8.0	5.6
SPM4012T- 1R0M-CA	1.0	+/-20%	100	45 max	38	4.8	6.0	4.3
SPM4012T- 1R5M-CA	1.5	+/-20%	100	70 max	59	3.5	4.8	3.5
SPM4012T- 2R2M-CA	2.2	+/-20%	100	95 max	82	3.3	4.4	2.9
SPM4012T- 3R3M-CA	3.3	+/-20%	100	145 max	123	2.8	3.5	2.4
SPM4012T- 4R7M-CA	4.7	+/-20%	100	205 max	178	2.0	2.5	2.0

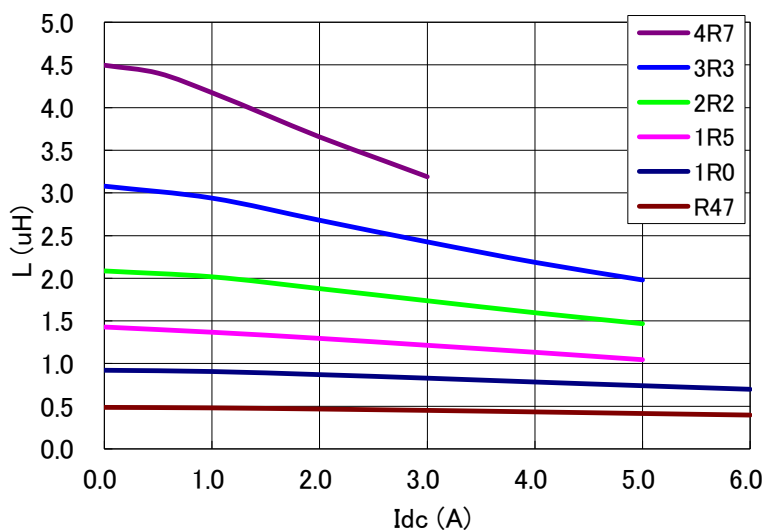
Note. Idc 1 : Based on the inductance change.( -30% Reduction from Nominal L Value )

Idc 2 : Based on the self temperature rise. (+40 deg typ.)

Operating Temperature Range: -40 °C ~ +125 °C (including self temperature rise)

**Caution:** Please contact our sales person when you consider organic solvent or aqueous cleaning.

### Inductance vs.DC Superposition



### Recommended pad layout

