

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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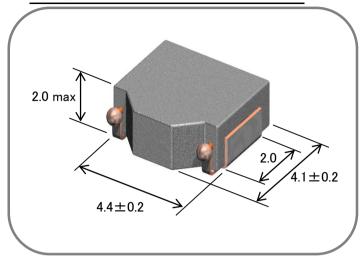
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







## Component Image & Dimension



#### **Features**

a) Small Footprint and Low Profile Design:

Footprint: 4.4 x 4.1 mm Typ.

Height: 2.0mm Max.

b) High Power Handling Capability:

Small Copper Loss

Using Large Saturation Induction of

Fe- based metals

c) Flat inductance performance over temperature based on the high curie temperature of the iron powder core material.

d) Automatic Mounting in Tape&Reel Package.

## **Applications**

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

### **Electrical Specification**

	Inductance		Test	DC Resistance		Rated DC Current		
TDK Identification	at <b>0A</b> (uH)	<b>Tol.</b> (%)	Freq. (kHz)	<b>Spec.</b> (m-Ohm)	Typ. (m-Ohm)	Id (A) max.	<b>c 1</b> (A) typ.	<b>Idc 2</b> (A) typ.
SPM4020T- R47M-CA	0.47	+/-20%	100	19.5 max	17.7	10.6	14.1	6.1
SPM4020T- 1R0M-CA	1.0	+/-20%	100	34.7 max	31.6	<i>6.7</i>	8.9	5.0
SPM4020T- 1R5M-CA	1.5	+/-20%	100	46.8 max	42.5	4.3	5.8	4.1
SPM4020T- 2R2M-CA	2.2	+/-20%	100	70.4 max	64.0	3.8	5.1	3.7
SPM4020T- 3R3M-CA	3.3	+/-20%	100	79.3 max	72.1	3.5	4.7	3.6
SPM4020T- 4R7M-CA	4.7	+/-20%	100	144.1 max	131.0	2.6	3.4	2.2

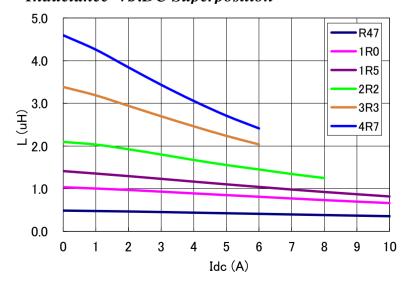
Note. Idc 1: Based on the inductance change. (-30% Reduction from Nominal L Value)

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

Operating Temperature Range: -40  $C\sim$ +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

