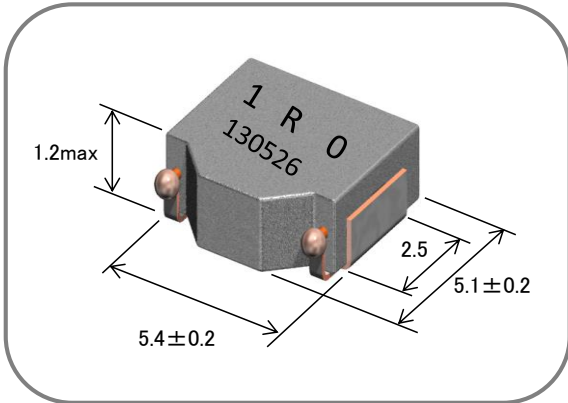


## Sampling Stage

### Component Image & Dimension



### Features

- a) Small Footprint and Low Profile Design :  
Footprint : 5.4 x 5.1 mm Typ.  
Height : 1.2mm 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 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)		Idc 2 (A)	
SPM5012T- R22M-LR	0.22	+/-20%	100	10.5 max	9.5	11.6	15.5	7.6	8.0
※ SPM5012T- R47M-LR	0.47	+/-20%	100	22.3 max	20.3	8.6	11.5	5.5	5.8
SPM5012T- 1R0M-LR	1.00	+/-20%	100	35.2 max	32.0	5.6	7.5	4.2	4.4
SPM5012T- 1R5M-LR	1.50	+/-20%	100	46.2 max	42.0	4.5	6.0	3.6	3.8
SPM5012T- 2R2M-LR	2.20	+/-20%	100	67.3 max	61.2	4.4	5.8	3.0	3.2
SPM5012T- 3R3M-LR	3.30	+/-20%	100	110.0 max	100.0	3.4	4.5	2.4	2.5
SPM5012T- 4R7M-LR	4.70	+/-20%	100	155.1 max	141.0	2.6	3.5	2.0	2.1
SPM5012T- 6R8M-LR	6.80	+/-20%	100	253.0 max	230.0	2.2	2.9	1.6	1.6
SPM5012T- 100M-LR	10.00	+/-20%	100	390.5 max	355.0	1.7	2.2	1.2	1.3

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

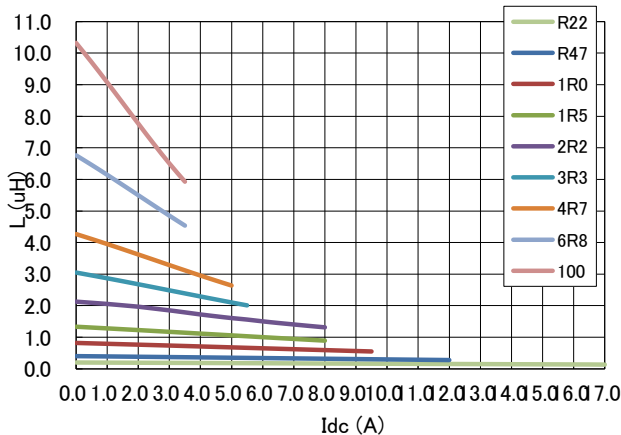
Idc 2 : Based on the self temperature rise. (+40 deg typ.)

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.**

### ※ Simulation Data

#### Inductance vs. DC Superposition



#### Recommended pad layout

