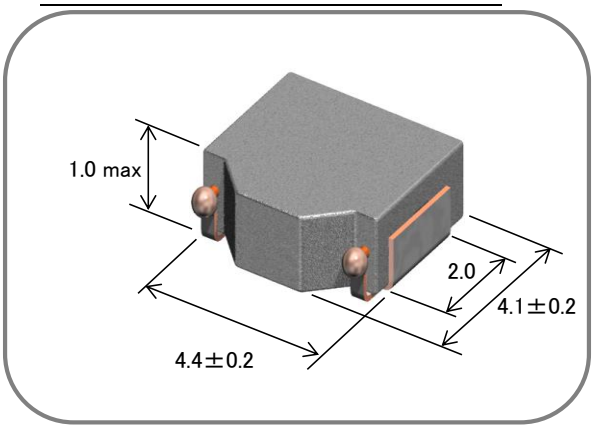
TDK-EPC Corporation

SPM4010-LR Series

SMD Power Inductor

Sampling Stage

Component Image & Dimension



Features

a) Small Footprint and Low Profile Design :
Footprint : 4.4 x 4.1 mm Typ.
Height : 1.0mm 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 etc.

Electrical Specification

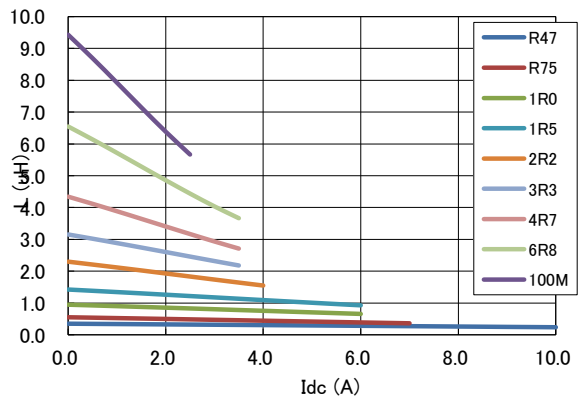
TDK Identification	Inductance at 0A (uH)	Tol. (%)	Test Freq. (kHz)	DC Resistance Spec. (m-Ohm)	DC Resistance Typ. (m-Ohm)	Rated DC Current Idc 1 (A) max.	Idc 1 (A) typ.	Idc 2 (A) max.	Idc 2 (A) typ.
SPM4010T-R47M-LR	0.47	+/-20%	100	22.6 max	20.5	6.2	8.3	4.7	4.9
※ SPM4010T-R75M-LR	0.75	+/-20%	100	38.0 max	34.6	4.5	6.0	3.6	3.8
※ SPM4010T-1R0M-LR	1.00	+/-20%	100	57.3 max	52.1	4.4	5.8	2.9	3.1
※ SPM4010T-1R5M-LR	1.50	+/-20%	100	69.4 max	63.1	3.8	5.0	2.7	2.8
※ SPM4010T-2R2M-LR	2.20	+/-20%	100	120.6 max	109.6	2.7	3.6	2.0	2.1
※ SPM4010T-3R3M-LR	3.30	+/-20%	100	155.0 max	140.9	2.5	3.3	1.8	1.9
※ SPM4010T-4R7M-LR	4.70	+/-20%	100	243.4 max	221.3	2.0	2.7	1.4	1.5
※ SPM4010T-6R8M-LR	6.80	+/-20%	100	363.7 max	330.7	1.7	2.3	1.2	1.2
SPM4010T-100M-LR	10.00	+/-20%	100	622.6 max	566.0	1.2	1.6	0.9	0.9

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 ℃～+125 ℃ (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