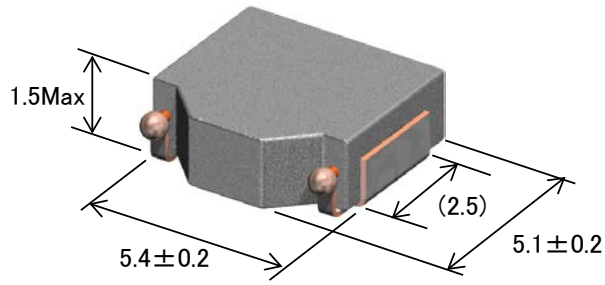
SPM5015-CA02 Series

SMD Power Inductor

Component Image & Dimension



Unit : mm

Features

a) Small Footprint and Low Profile Design :
Footprint : 5.4 x 5.1 mm Typ.
Height : 1.5mm 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 iro
powder core material.
d) Automatic Mounting in Tape&Reel Package.

Applications

In-vehicle infotainment only

Electrical Specification (Provisional value)

TDK Identification	Lo / Inductance at 0A (uH)	Tol. (%)	Test Freq. (kHz)	DC Resistance Max. (mΩ)	DC Resistance Typ. (mΩ)	Rated DC Current Isat (A) Typ.	Rated DC Current Itemp (A) Typ.
SPM5015T- R47 M-CA02	0.47	+/-20%	100	12.1max	11.0	12.0	9.0
SPM5015T- 1R0M-CA02	1.00	+/-20%	100	24.8max	22.5	8.0	6.3
SPM5015T- 1R5M-CA02	1.50	+/-20%	100	36.9max	33.5	6.0	5.2
SPM5015T- 2R2M-CA02	2.20	+/-20%	100	43.5max	39.5	5.7	4.8
SPM5015T- 3R3M-CA02	3.30	+/-20%	100	82.5max	75.0	4.4	3.5
SPM5015T- 4R7M-CA02	4.70	+/-20%	100	103.5max	90.0	3.6	3.2
SPM5015T- 6R8M-CA02	6.80	+/-20%	100	134.6max	117.0	3.4	2.8
SPM5015T- 100M-CA02	10.00	+/-20%	100	193.8max	168.5	2.7	2.3

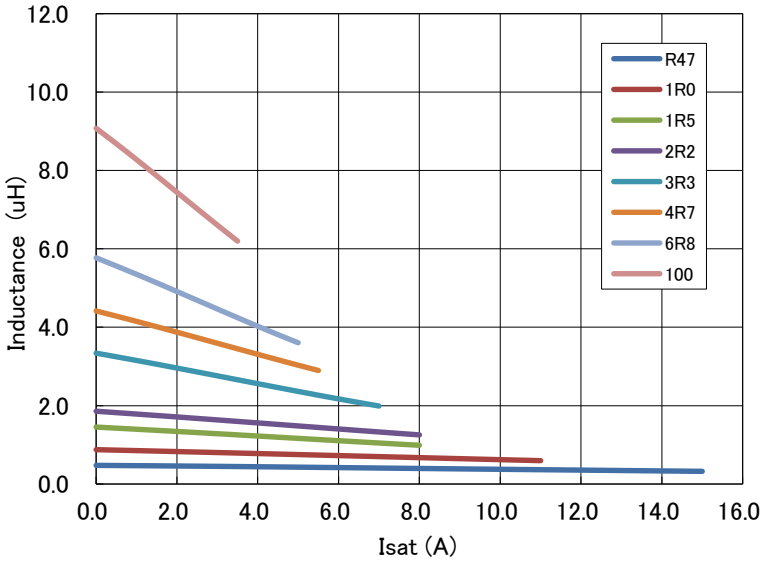
Note. *Isat : Based on the inductance change.(drop -30% Typ. from Lo)*

Itemp : Based on the self temperature rise. (+40 ℃ Typ.)

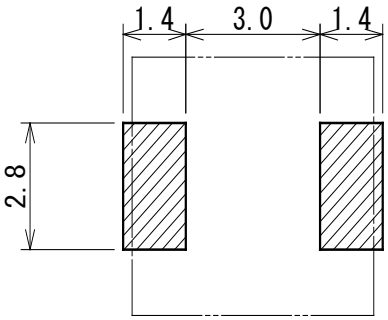
Operating Temperature Range: -40 ℃～+105 ℃ (including self temperature rise)

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

Inductance vs.DC Superposition



Recommended pad layout



Unit : mm