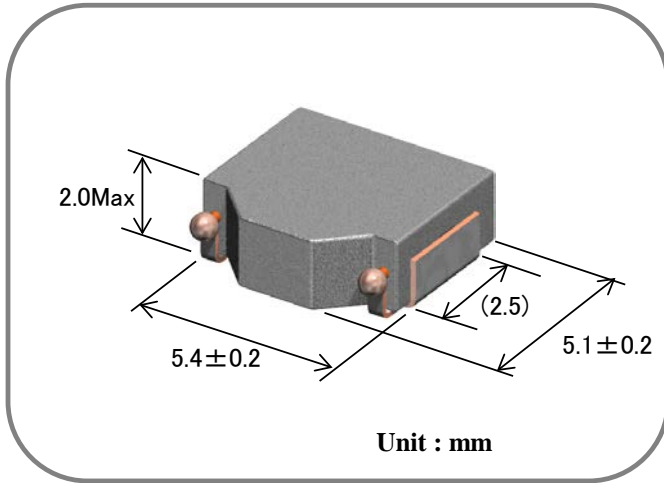


Component Image & Dimension



Features

- a) Small Footprint and Low Profile Design :
Footprint : 5.4 x 5.1 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

In-vehicle infotainment only

Electrical Specification (Provisional value)

TDK Identification	Lo / Inductance		Test Freq. (kHz)	DC Resistance		Rated DC Current	
	at 0A (uH)	Tol. (%)		Max. (mΩ)	Typ. (mΩ)	Isat (A) Typ.	Itemp (A) Typ.
SPM5020T- R47M-CA02	0.47	+/-20%	100	11.5max	10.4	14.0	8.6
SPM5020T- 1R0M-CA02	1.00	+/-20%	100	17.2max	15.6	9.5	6.8
SPM5020T- 1R5M-CA02	1.50	+/-20%	100	24.8max	22.5	9.0	5.9
SPM5020T- 2R2M-CA02	2.20	+/-20%	100	40.7max	37.0	7.0	4.6
SPM5020T- 3R3M-CA02	3.30	+/-20%	100	61.0max	53.0	6.5	3.9
SPM5020T- 4R7M-CA02	4.70	+/-20%	100	67.7max	58.8	5.3	3.7
SPM5020T- 6R8M-CA02	6.80	+/-20%	100	118.5max	103.0	4.2	2.8
SPM5020T- 100M-CA02	10.00	+/-20%	100	174.8max	152.0	3.4	2.3

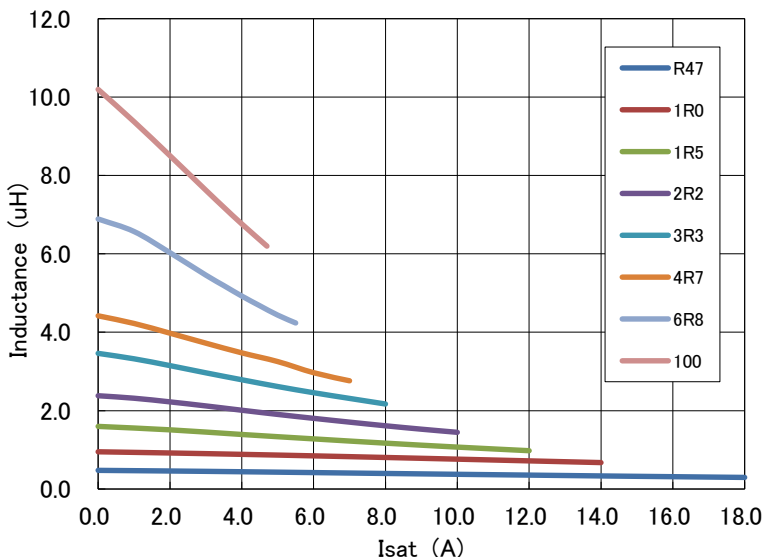
Note. Isat : Based on the inductance change.(drop -30% Typ. from Lo)

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

Operating Temperature Range: -40 °C ~ +105 °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

