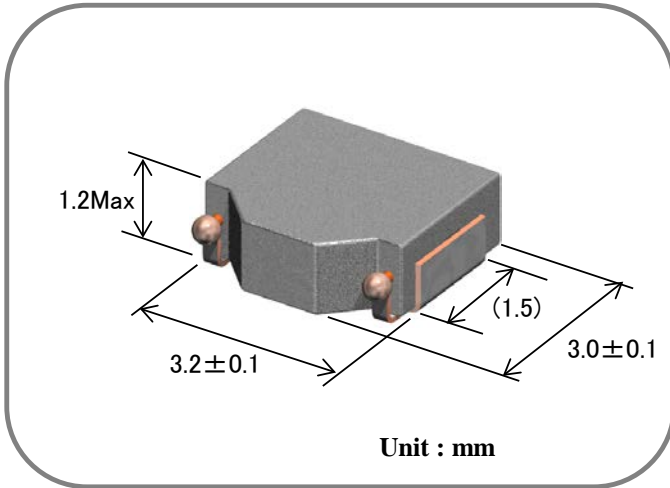


Component Image & Dimension



Features

- a) Small Footprint and Low Profile Design :
Footprint : 3.2 x 3.0 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

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. |
| SPM3012T- R47M-CA02 | 0.47 | +/-20% | 100 | 34.8max | 31.6 | 7.3 | 4.5 |
| SPM3012T- 1R0M-CA02 | 1.00 | +/-20% | 100 | 59.4max | 54.0 | 5.0 | 3.4 |
| SPM3012T- 1R5M-CA02 | 1.50 | +/-20% | 100 | 81.4max | 74.0 | 4.3 | 2.9 |
| SPM3012T- 2R2M-CA02 | 2.20 | +/-20% | 100 | 102.3max | 93.0 | 3.7 | 2.6 |
| SPM3012T- 3R3M-CA02 | 3.30 | +/-20% | 100 | 195.2max | 177.4 | 2.7 | 1.8 |
| SPM3012T- 4R7M-CA02 | 4.70 | +/-20% | 100 | 266.3max | 231.5 | 2.3 | 1.7 |

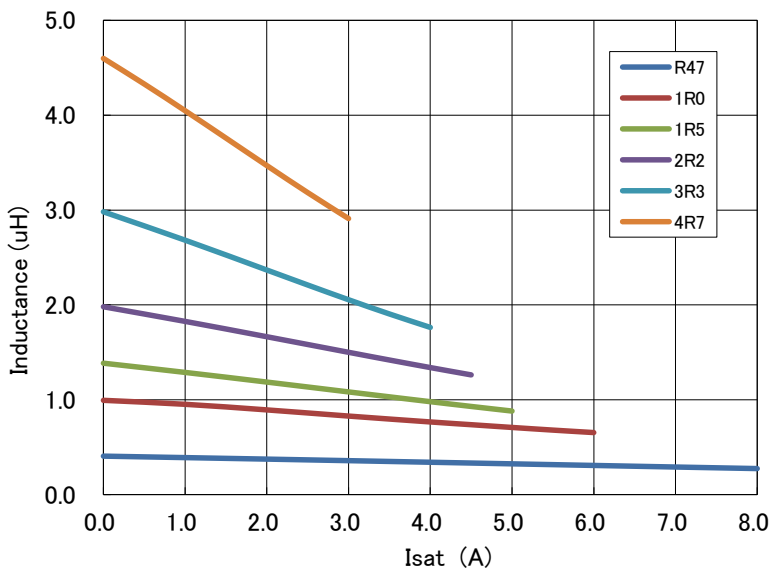
Note. Isat : Based on the inductance change.(drop -30% Typ. from Lo)

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

