

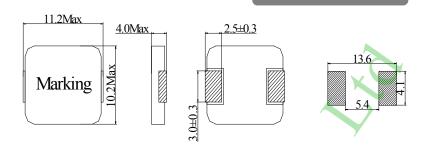
# **Power Inductor for Surface Mounting**

Inductance Range: 0.15μH~4.7μH Temperature Range: −40℃~+125℃

## PSM-1040B Series

#### **Dimensions (mm)**





### Features:

- ★Quantity / Reel: 800pcs
- ★High performance (Isat) realized by metal dust core.
- ★Low profile: Thickness max. 4.0mm
- ★Low loss realized with low DCR
  Capable of corresponding high frequency (3MHz)
- ★Design to customer requirement

## **Application:**

- ★DC/DC converter for CPU in Notebook PC
- ★Thin type on-board power supply module for exchangerVRM for server

### **Electrical Characteristics:**

## Configuration:

Pb

<1000ppm

PSM – 1040B - 1R0 - M

RoHS Compliant(SGS Certified Result)

Cd

ND

(2)

- (3) (4)
- (1)Product Code(P&Z for SMD type)

Cr+6

ND

- (2) Series Code(Typical dimension)
- (3)Inductance:  $1R0 = 1.0 \mu H$
- (4) Inductance tolerance:  $M = \pm 20\%$ ,  $L = \pm 15\%$ ,  $K = \pm 10\%$

**PBBs** 

ND

**PBDEs** 

ND

P&Z Part Number	L0 @ (0A) Inductance	DCR(mΩ)		Heat Rating Current DC Amps. Idc ( A )	Saturation Current DC Amps. Isat (A)
	( μH ) <b>±20</b> %	Typical	Maximum	Typical	Typical
PSM1040B-R15M	0.15	0.50	0.65	40.0	75.0
PSM1040B-R22M	0.22	0.90	1.0	35.0	60.0
PSM1040B-R39M	0.39	1.10	1.3	30.0	60.0
PSM1040B-R41M	0.41	1.10	1.3	30.0	60.0
PSM1040B-R45M	0.45	1.10	1.3	29.0	45.0
PSM1040B-R68M	0.68	2.40	2.7	22.0	39.0
PSM1040B-R88M	0.88	2.70	3.0	20.0	38.0
PSM1040B-1R5M	1.5	3.80	4.2	16.0	33.0
PSM1040B-2R2M	2.2	6.70	7.0	12.0	27.0
PSM1040B-4R7M	4.7	15.0	16.5	9.5	17.0

- ★If you require another part number please contact with us.
- 1.All test data is referenced to 25°C ambient. Operating. Temperature Range -55°C to + 125°C. Test Condition:100KHz, 1.0Vrms.
- 2.Idc:DC current (A) that will cause an approximate  $\triangle$  °CT of 40 °C.
- 3.Isat:DC current (A) that will cause Lo to drop approximately 30%.
- 4.The part temperature (ambient + temp rise ) should not exceed 125°C under worse case operating conditions. Circuit design , component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.
- 5. The rated current as listed is either the saturation current or the heating current depending on which value is lower.