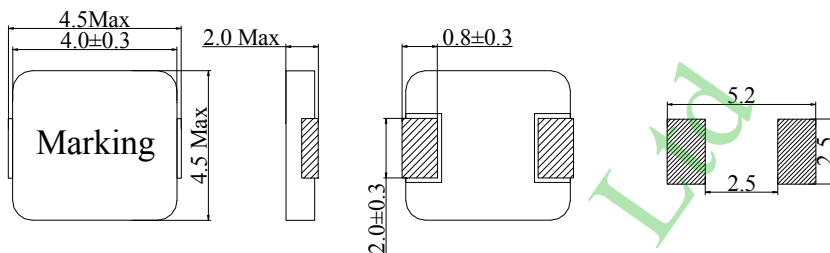


**Inductance Range: 0.1μH~4.7μH**  
**Temperature Range: -40℃~+125℃**

### Dimensions (mm)



### PSM-0420B Series

### Features:

- ★Quantity / Reel: 3000pcs
- ★High performance (Isat) realized by metal dust core.
- ★Low profile: Thickness max. 2.0mm
- ★Low loss realized with low DCR  
Capable of corresponding high frequency (3MHz)
- ★Design to customer requirement

### RoHS Compliant(SGS Certified Result)

|          |    |      |      |       |
|----------|----|------|------|-------|
| Pb       | Cd | Cr+6 | PBBs | PBDEs |
| <1000ppm | ND | ND   | ND   | ND    |



### Application:

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

### Configuration:

PSM – 0420B - 1R0 - M

(1) (2) (3) (4)

(1)Product Code(P&Z for SMD type)

(2)Series Code(Typical dimension)

(3)Inductance: 1R0 = 1.0 μH

(4) Inductance tolerance: M= ±20%, L= ±15%, K= ±10%

### Electrical Characteristics:

| P&Z Part Number | L0 @ (0A)<br>Inductance<br>( μH ) ±20% | DCR(mΩ) |         | Heat Rating Current<br>DC Amps. Idc ( A ) | Saturation Current<br>DC Amps. Isat ( A ) |
|-----------------|--|---------|---------|---|---|
|                 |  | Typical | Maximum | Typical                                   | Typical                                   |
| PSM0420B-R10M   | 0.10                                   | 4.5     | 5.0     | 11.0                                      | 30.0                                      |
| PSM0420B-R22M   | 0.22                                   | 7.3     | 8.0     | 9.0                                       | 17.0                                      |
| PSM0420B-R47M   | 0.47                                   | 14.0    | 15.5    | 6.0                                       | 11.5                                      |
| PSM0420B-R56M   | 1.0                                    | 32.0    | 36.0    | 3.8                                       | 8.5                                       |

★If you require another part number please contact with us.

- All test data is referenced to 25℃ ambient. Operating. Temperature Range -55℃to + 125℃. Test Condition:100KHz, 1.0Vrms.
- Idc:DC current (A) that will cause an approximate Δ℃T of 40℃.
- Isat:DC current (A) that will cause Lo to drop approximately 30%.
- The part temperature (ambient + temp rise ) should not exceed 125℃ 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.
- The rated current as listed is either the saturation current or the heating current depending on which value is lower.