

Power Inductor for Surface Mounting

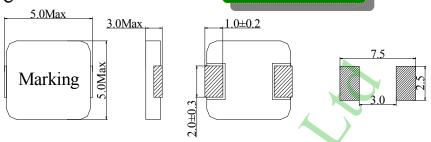
PSM-0530 Series

Inductance Range: 0.1μΗ~6.8μΗ

Temperature Range: -40°C~+125°C

Dimensions (mm)





Features:

★Quantity / Reel: 2000pcs

★High performance (Isat) realized by metal dust core.

★Low profile: Thickness max. 3.0mm ★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:

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

Configuration:

PSM - 0530 - 1R0 - M

(2) (3) (4)

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

(2)Series Code(Typical dimension)

(3)Inductance: $1R0 = 1.0 \mu H$

(4) Inductance tolerance: $M = \pm 20\%$, $L = \pm 15\%$, $K = \pm 10\%$

L0 @ (0A) Inductance	DC	$R(m\Omega)$	Heat Rating Current	Saturation Current
	DCR(mΩ)		Heat Rating Current DC Amps. Idc (A)	Saturation Current DC Amps. Isat (A)
(μH) ±20%	Typical	Maximum	Typical	Typical
0.10	2.0	2.5	32.0	34.0
0.12	2.2	2.6	30.0	32.0
0.20	3.5	3.9	21.0	14.5
0.35	4.5	5.0	16.5	9.0
0.47	7.4	8.5	13.0	12.0
0.68	11.0	12.0	8.5	14.0
1.0	13.0	14.0	7.0	11.0
1,2	15.0	16.0	6.5	11.0
1.5	20.0	25.0	6.0	10.0
2.2	29.0	35.0	5.5	9.0
3.3	32.0	38.0	5.0	7.0
4.7	50.0	60.0	4.0	5.0
6.8	96.0	110.0	3.0	3.5
	0.10 0.12 0.20 0.35 0.47 0.68 1.0 1.2 1.5 2.2 3.3 4.7	0.10 2.0 0.12 2.2 0.20 3.5 0.35 4.5 0.47 7.4 0.68 11.0 1.0 13.0 1,2 15.0 1.5 20.0 2.2 29.0 3.3 32.0 4.7 50.0	0.10 2.0 2.5 0.12 2.2 2.6 0.20 3.5 3.9 0.35 4.5 5.0 0.47 7.4 8.5 0.68 11.0 12.0 1.0 13.0 14.0 1.2 15.0 16.0 1.5 20.0 25.0 2.2 29.0 35.0 3.3 32.0 38.0 4.7 50.0 60.0	0.10 2.0 2.5 32.0 0.12 2.2 2.6 30.0 0.20 3.5 3.9 21.0 0.35 4.5 5.0 16.5 0.47 7.4 8.5 13.0 0.68 11.0 12.0 8.5 1.0 13.0 14.0 7.0 1.2 15.0 16.0 6.5 1.5 20.0 25.0 6.0 2.2 29.0 35.0 5.5 3.3 32.0 38.0 5.0 4.7 50.0 60.0 4.0

- ★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.