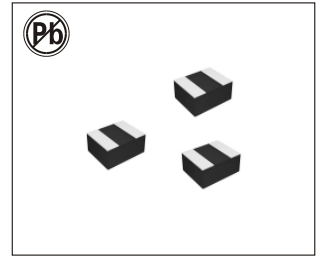


# SMD MOLDED POWER INDUCTORS

## LPM5020C SERIES



### FEATURES:

- High performance (Isat) realized by Carbonyl iron powder
- Low profile: 5.2mm x 5.4mm x 2.0mm
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard
- RoHS compliant

### COMMON APPLICATIONS:

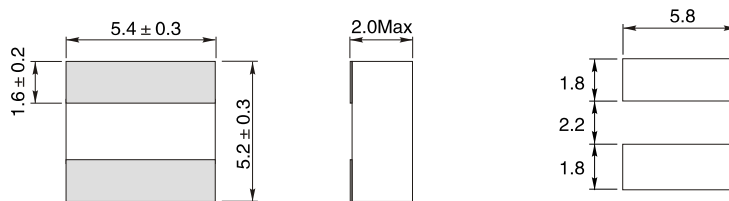
- DC/DC converter for CPU in Notebook PC
- Cellular phones, LCD displays, HDDs, DVCs, DSCs, PDAs etc..
- Thin type on-board power supply module for exchanger
- VRM for server

## ELECTRICAL CHARACTERISTICS:

Part Number	Inductance L0(μH) ±20% @0Adc	Heat rating current DC Amps IDC(A)	Saturation current DC Amps Isat(A)	DCR Typ. (mΩ).	DCR Max. (mΩ).
LPM5020C-R15M	0.15	29.4	27.0	1.8	2.1
LPM5020C-R33M	0.33	24.4	18.8	2.7	3.2
LPM5020C-R47M	0.47	22.1	15.7	3.7	4.3
LPM5020C-R68M	0.68	17.6	14.0	5.3	6.1
LPM5020C-1R0M	1.0	15.0	11.4	7.5	8.7
LPM5020C-1R5M	1.5	12.8	8.9	11.4	13.2
LPM5020C-2R2M	2.2	10.7	7.6	16.3	18.8
LPM5020C-3R3M	3.3	9.4	6.5	23.4	27.0
LPM5020C-4R7M	4.7	7.9	5.3	36.0	41.5
LPM5020C-6R8M	6.8	4.9	4.5	55.0	63.5

## TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

### Dimensions(mm)



### Winding



### Notes

- Test Frequency : 100KHz / 1V
- All test data is referenced to 25°C ambient.
- Heat Rated Current (I<sub>rms</sub>) DC current (A) that will cause an approximate ΔT of 40°C
- Saturation Current (Isat) DC current (A) that will cause L0 to drop approximately 30%
- Operating Temperature Range -55°C to +125°C
- The part temperature (ambient + temp rise) should not exceed 125°C under the worst case operating conditions. Circuit design, component placement, PCB 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.