



SMHC2511A Series



1. Features:

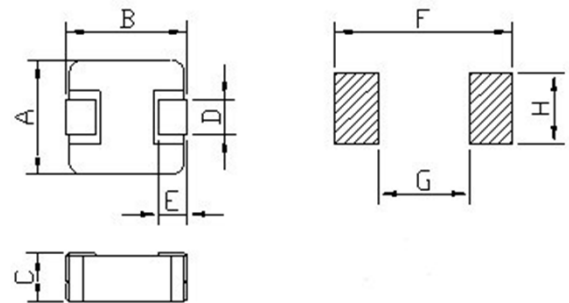
- Molding Inductor for high frequency application.
- Inductance range from 1uH to 22uH ideally for input filter application.
- Ideal for computer servers, workstations, VGA cards, High-End switches and routers, voltage-regulator modules, and High Density DC to DC converter boards.
- Low DC Resistance for higher current application.
- Tape & Reel Quantity: 1,000 piece per 13 inches reel.
- Operating Temperature Range -55°C to + 125°C



2. Electrical Characteristics:

Part Number	OCL Inductance uH $\pm 20\%$ @0A	DCR (m Ω) Typ.	DCR (m Ω) Max.	Heat Rating Current Ldc (AMP) Typ.	Saturation Current Lsat(AMP) Typ.
SMHC2511A-1R0MHF	1.0	7.6	8.0	12.5	22.0
SMHC2511A-1R5MHF	1.5	11.7	12.5	10.5	18.0
SMHC2511A-2R2MHF	2.2	15.7	16.5	9.0	10.0
SMHC2511A-3R3MHF	3.3	25.0	27.5	7.0	9.8
SMHC2511A-4R7MHF	4.7	31.8	33.4	6.0	6.0
SMHC2511A-5R6MHF	5.6	42.0	45.0	5.5	6.2
SMHC2511A-6R8MHF	6.8	44.6	46.8	5.5	6.0
SMHC2511A-8R2MHF	8.2	47.0	55.0	5.5	5.8
SMHC2511A-100MHF	10.0	62.0	68.0	4.0	5.5
SMHC2511A-220MHF	22.0	128.9	135.0	2.9	2.5

3. Mechanical Dimensions (unit:mm):



A \pm	B \pm	C	D \pm	E \pm	F	G	H
0.20	0.30	Max.	0.30	0.50	Typ.	Typ.	Typ.
6.60	7.10	3.00	3.00	1.60	7.40	3.70	3.50

Notes:

1. Open Circuit Inductance(OCL) and L@ Irms and L @Lsat are measured at: 100KHz, 1.0V ;(Ta=25°C).
2. Lsat: DC current that causes inductance to drop approximately by 30% from OCL ;(Ta=25°C).
3. Irms: DC current for an approximate temperature rise of 40°C without core loss. Derating is necessary for AC currents, PCB pad layout, trace thickness and width, air-flow and proximity of other heat generating components will affect the temperature rise. It is recommended the part temperature not exceed 125°C under worst case operating conditions verified in the end application.
4. Inductance vs. DC Current vs. Temperature Curve, please see the next page to get more detail information.



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4. Inductance vs. Current vs. Temperature

