



SC3020 Series SMD Power Inductor



1.Features:

- 7.4 x 7.4 x 5.4 mm package SMD high current inductor.
- Low core loss, no thermal aging.
- Ideal for DC to DC converter. VRM & high density board design.
- Tight DCR tolerance for accurate current sensing.
- Operating frequency up to 2 MHz, RoHS & HF compliance .
- T & R Qty: 1000 pcs , 13" Reel .

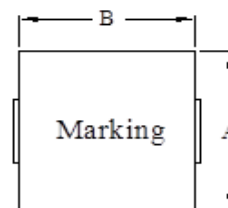


2.Electrical Specifications:

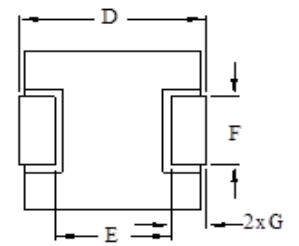
Part Number	L $\pm 20\%$ (uH)	DCR $\pm 7\%$ (m Ω)	Isat ² (Amp.)	I _{rms} ³ (Amp.)	L @ I _{rms} (uH)	I _{max.} ⁴ (Amp.)	L @ I _{max.} (uH)
SC3020-R30MHF	0.30	0.83	36.00	22.00	0.268	36.00	0.227
SC3020-R40MHF	0.40	1.10	32.00	21.00	0.320	35.00	0.280
SC3020-R68MHF	0.68	1.95	25.00	18.00	0.553	27.00	0.477
SC3020-1R0MHF	1.00	2.60	22.00	17.00	0.759	26.00	0.620
SC3020-1R5MHF	1.50	5.10	18.00	15.00	1.150	20.00	1.000
SC3020-1R7MHF	1.70	4.00	15.50	12.00	1.275	22.00	0.885
SC3020-2R2MHF	2.20	6.00	14.00	11.00	1.800	17.00	1.380
SC3020-3R3MHF	3.30	9.20	12.00	10.00	2.500	15.00	1.500
SC3020-4R7MHF	4.70	12.40	10.00	9.00	3.470	12.00	2.760
SC3020-6R8MHF	6.80	19.50	8.00	8.00	5.800	11.00	5.160

3.Mechanical Specifications (Unit:mm):

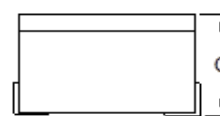
A	B	C	D	E	F	G
± 0.3	± 0.3	(Max.)	(Max.)	(Ref.)	(Ref.)	(Ref.)
7.40	7.40	5.40	8.80	5.20	2.80	1.30



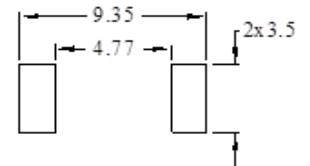
TOP VIEW



BOTTOM VIEW



SIDE VIEW



Suggested Pad Layout

Note:

- 1>. Test condition: 300KHz, 0.25V, at 25°C.
- 2>. Isat : DC current that will cause inductance to drops approximately by 30% (typical) ;
- 3>. I_{rms}: DC current rating at 40°C temperature raise (typical).
- 4>. I_{max.}: DC current rating at 100°C temperature raise (typical).
- 5>. Operating temperature: -40°C to 150°C.



SC3020 Series SMD Power Inductor



4. Inductance Characteristics (Inductance vs. Current):

