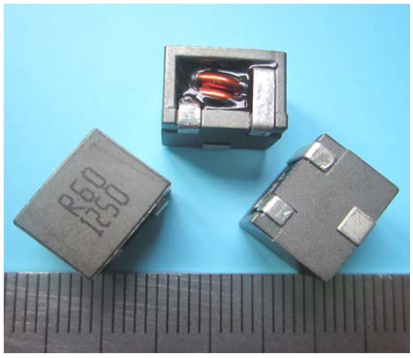
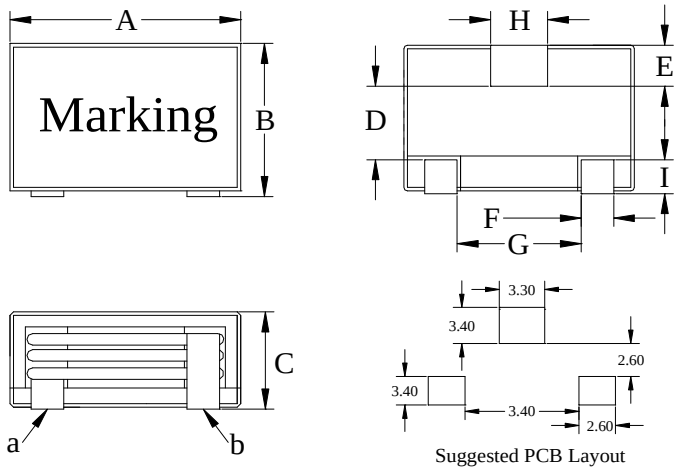
SQ4331 Series

1. Features:

· Ferrite based SMD Inductor with lower core loss.
· Custom values are welcomed.
· High current output chokes, up to 43 Amp with approx. 20% roll off.
· Low Profile 8.0mm Max. height .
· Foot Print 10.8 x 9.2 mm Max.
· Ideal for Buck Converter, VRM & High Density Board Design.
· Operating frequency up to 1 MHz application.
· Operating Temperature Range -55°C to +130°C, RoHs & HF compliance.
· T & R Qtys: 500 pcs,13" Reel.



2. Mechanical Dimension(Unit:mm):



Suggested PCB Layout

Type	SQ4331
A	10.8 (Max.)
B	9.2 (Max.)
C	8.0 (Max.)
D	3.5 ± 0.4
E	2.4 ± 0.2
F	1.8 ± 0.2
G	4.5 ± 0.4
H	2.5 ± 0.2

3. Electrical Characteristic of SQ4331 Series:

ITG Part Number	OCL (uH) ±20%	DCR (mΩ) ±6%	Isat1 (A) @25℃	Isat2 (A) @100℃	Irms (A) @25℃	Irated (A)	Inductance @ Irated (uH)
SQ4331-R40MHF	0.40	0.91	43.0	34.0	38.0	38.0	0.38
SQ4331-R45MHF	0.45	0.91	41.0	31.7	38.0	38.0	0.41
SQ4331-R60MHF	0.60	0.91	32.0	25.5	38.0	32.0	0.48
SQ4331-1R0MHF	1.00	1.76	26.0	20.3	26.1	26.0	0.80

Note:

1>.Open Circuit Inductance(OCL) and L@Irms and L@Isat are measured at:100KHz,0.1V;(Ta=25℃).
2>.Isat1&Isat2 : DC current that will cause inductance to drops by 20%(Typ.);(Ta=25℃).
3>.Irms: DC current for an approximate temperature rise of 40℃ 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>.The nominal DCR is measured from point "a" to point"b",as shown above on the mechanical drawing.
5>.Inductance at Irated is a typical inductance value for the component taken at rated current.
6>.The rated current as listed is either the saturation current (@25°C) or the heating current depending on which value is lower.

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Inductance vs. Current