

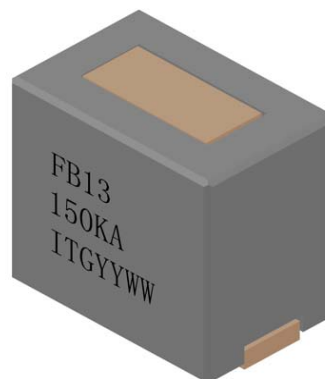


FB13A Series



1. Features of FB13A Series :

- Ferrite based SMD inductor with lower core loss.
- Inductance Range: 120.0 nH to 300.0 nH , custom values are welcomed.
- High current output chokes, up to 94.0 Amp with approx. 20% roll off.
- Low Profile 9.00 mm Max. height.
- 9.40 x 6.20 mm Foot Print.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency up to 5.0 MHz.
- Operating Temperature Range -55°C to + 130°C. RoHs & HF compliant.
- T & R Qtys: 500 pcs , 13" Reel.

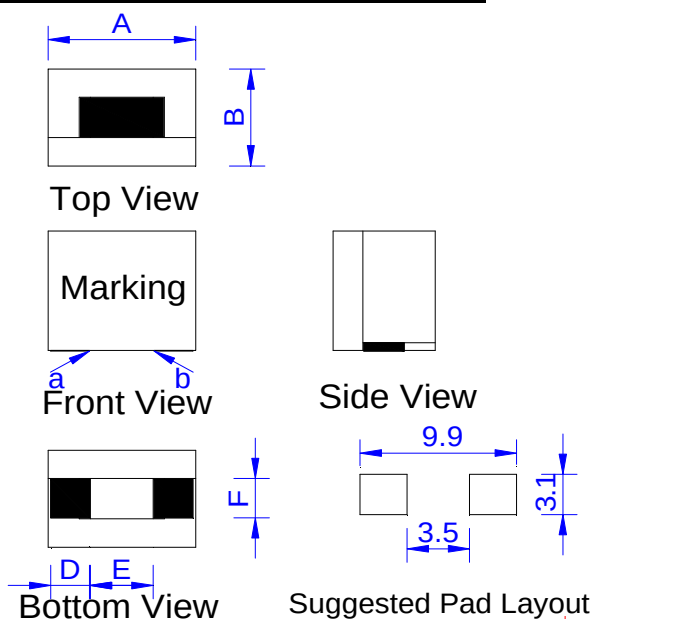


2. Electrical Characteristic of FB13A Series:

ITG Part Number	OCL ¹ (nH) ± 10%	L @ Isat1 ² (nH) Min.	DCR ³ (mΩ) ± 5%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @125°C	Irms ⁵ (A) @25°C
FB13A-120K	120.00	86.40	0.17	94.00	75.00	66.00
FB13A-150K	150.00	108.00	0.17	75.00	60.00	66.00
FB13A-170K	170.00	122.40	0.17	65.00	52.00	66.00
FB13A-180K	180.00	129.60	0.17	60.00	48.00	66.00
FB13A-300K	300.00	216.00	0.17	33.00	29.00	66.00

3. Mechanical Dimension(Unit:mm):

A	B	C	D	E	F
± 0.2	± 0.2	(Max.)	± 0.3	± 0.3	± 0.2
9.40	6.20	9.00	2.60	4.00	2.60



Notes:

- 1> Open Circuit Inductance (OCL) test condition: 100KHz,1.0Vrms,0Adc at 25°C.
- 2> L @ Isat and L @ Irms Test condition: 100KHz,1.0Vrms, (Ta=25°C).
- 3> The nominal DCR is measured from point "a" to point "b", as shown above on the mechanical drawing (Ta=25°C).
- 4> Isat1 & Isat2 : DC current that will cause inductance to drop approximately by 20%.
- 5> 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 130°C under worst case operating conditions as verified in the end application.