



AFA41405B Series



1. Features of AFA41405B Series :

- Ferrite based SMD inductor with lower core loss.
- Inductance Range: 40.0nH to 220.0nH, Custom values are welcomed.
- High current output chokes, up to 220.0 Amp with approx. 20% roll off.
- Low Profile 10.0 mm Max. height .
- Foot Print 10.20 x 4.80 mm .
- Perfect for high density designs with limited board space.
- Operating frequency up to 5.0 MHz application.
- Operating Temperature Range -55° C to + 130° C , RoHs & HF compliance .
- T & R Qty: 500 pcs , 13" Reel ;

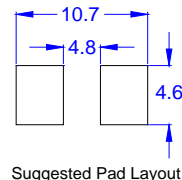
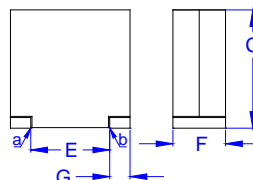
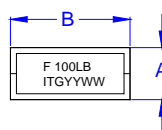


2. Electrical Characteristic of AFA41405B Series:

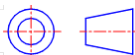
ITG Part Number	OCL ¹ (nH) ± 15%	L @ Isat1 ² (nH) Min.	DCR ³ (mΩ) Max.	Isat1 ¹ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Irms ⁵ (A) @25°C
AFA41405B-40L	40.00	28.80	0.23	220.00	210.00	200.00	85.00
AFA41405B-45L	45.00	32.40	0.23	210.00	200.00	190.00	85.00
AFA41405B-50L	50.00	36.00	0.23	190.00	180.00	170.00	85.00
AFA41405B-70L	70.00	50.40	0.23	145.00	135.00	120.00	85.00
AFA41405B-80L	80.00	57.60	0.23	123.00	112.00	105.00	85.00
AFA41405B-100L	100.00	72.00	0.23	100.00	90.00	85.00	85.00
AFA41405B-120L	120.00	86.40	0.23	82.00	75.00	72.00	85.00
AFA41405B-150L	150.00	108.00	0.23	65.00	60.00	55.00	85.00
AFA41405B-220L	220.00	158.40	0.23	42.00	39.00	36.00	85.00

3. Mechanical Dimension(Unit : mm):

A	B	C	E	F	G
Max.	Max.	Max.	Nom.	± 0.20	± 0.25
4.80	10.20	10.00	5.20	4.10	2.50



Third Angle Projection:



Notes:

1. Open Circuit Inductance (OCL) test condition:500KHz,0.25Vrms,0Adc ,at 25 °C.
2. L @ Isat and L @ Irms Test condition:500KHz,0.25Vrms (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 & Isat3 : 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 verified in the end application.

● New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275
 ● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767
 ● sales@ITG-Electronics.com ● www.ITG-Electronics.com Revision B.0: August 18, 2022

*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.

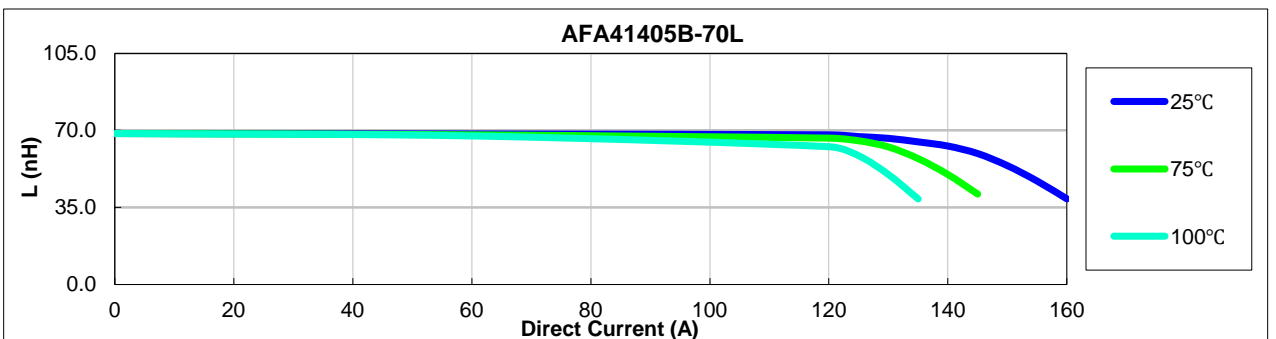
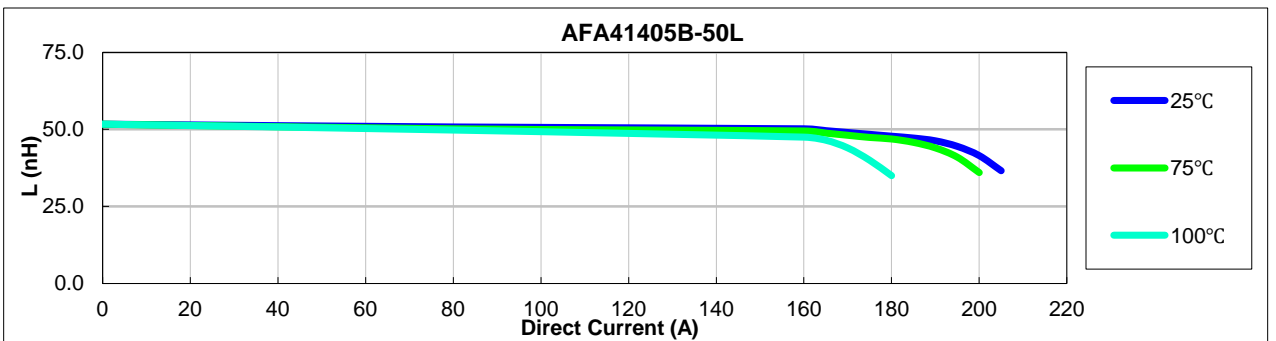
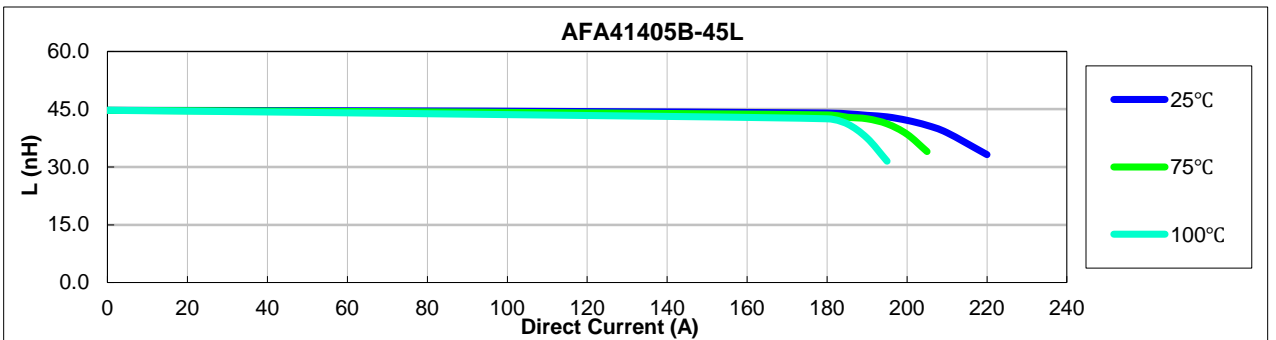
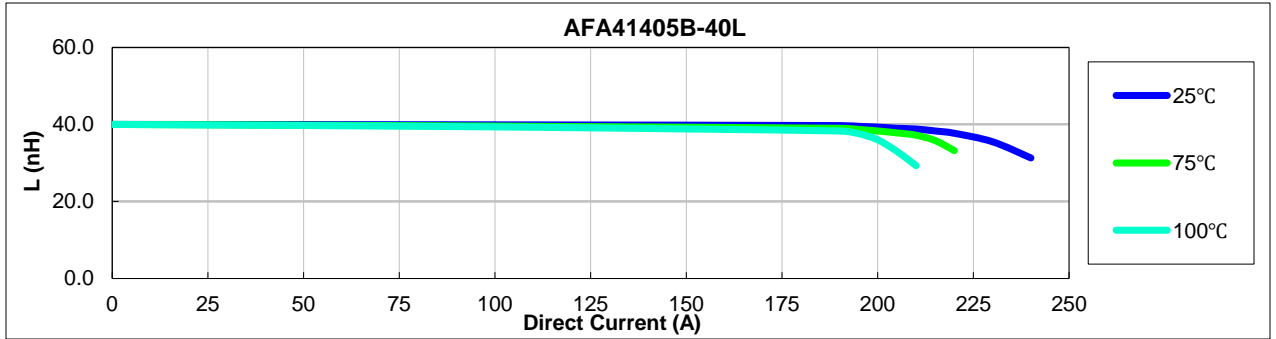


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Halogen Free

4. Inductance Characteristics (Inductance vs Current):



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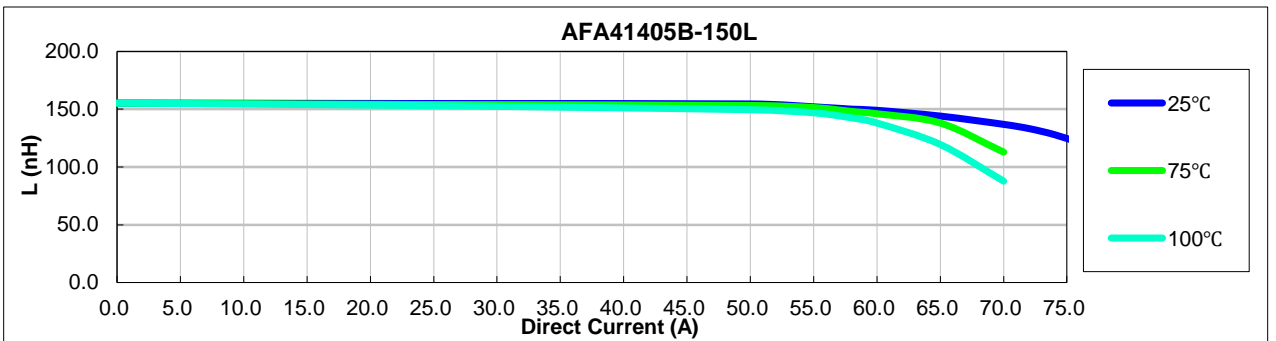
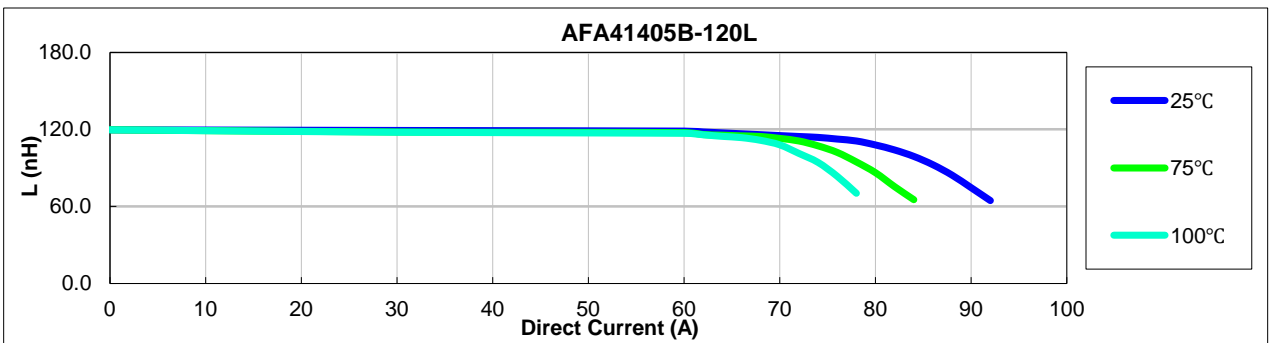
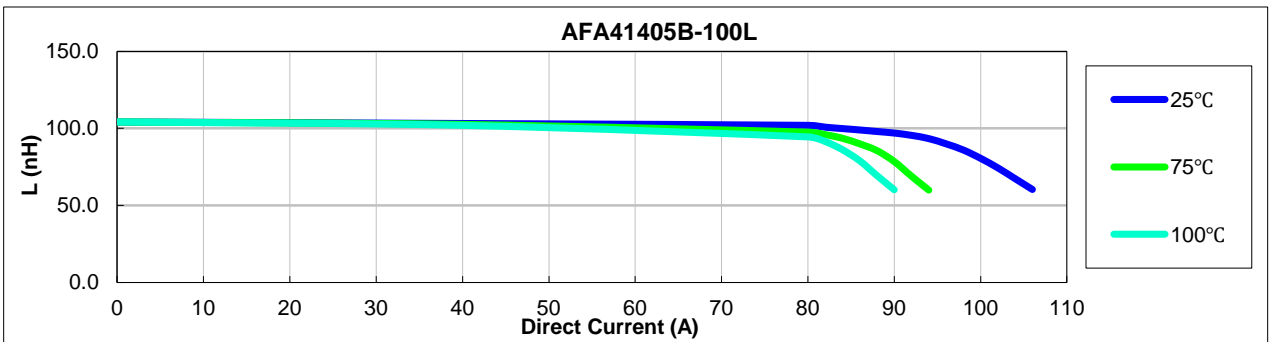
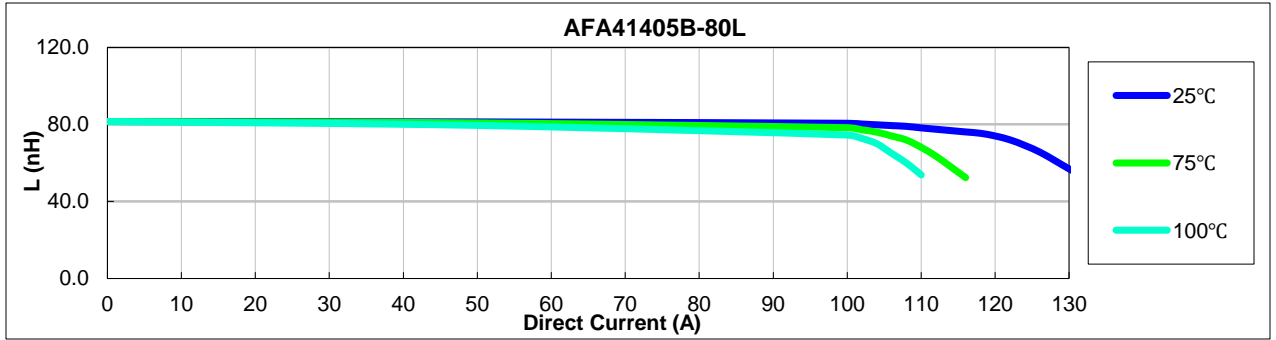


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