

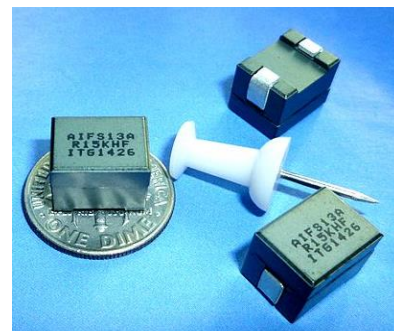


AIFS13A Series



1. Features:

- Designed for use with Infineon® DrBlade.
- Ferrite based SMD Inductor with lower core loss.
- Inductance Range:79.0nH to 300.0nH. Custom values are welcomed.
- High current output chokes, upto 124.0 Amp with approx. 20% roll off.
- Low Profile 9.0/9.1/9.2/9.3mm typical height with 0.9mm clearness.
- Foot Print 11.0 x 8.2 mm Max.
- Perfect for high density designs with limited board space.
- Saves 50% of application board area when compared to standard design approach.
- Operating frequency up to 2.0 MHz.
- Operating Temperature Range -55°C to + 130°C , RoHs & HF compliant .
- T & R Qtys: 400 pcs , 13" Reel.

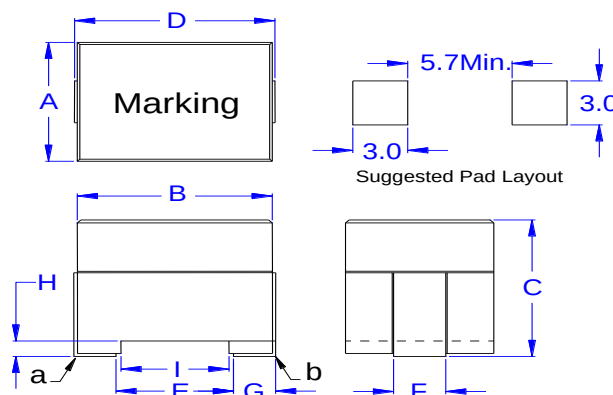


2. Electrical Characteristic of AIFS13A Series:

Part Number	OCL ¹ (nH) ± 10% or 15%	L @ Isat1 ² (nH) Min.	DCR ³ (mΩ) ± 10.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Irms ⁵ (A) @25°C	Dim. C (mm) ± 0.20
AIFS13A-R08LHF	79.00 , 15%	56.88	0.22	124.00	120.00	115.00	69.00	9.30
AIFS13A-R09LHF	88.00 , 15%	63.36	0.22	118.00	113.00	109.00	69.00	9.20
AIFS13A-R12KHF	115.00 , 10%	82.80	0.22	100.00	89.00	92.00	69.00	9.10
AIFS13A-R15KHF	150.00 , 10%	108.00	0.22	88.00	85.00	82.00	69.00	9.00
AIFS13A-R18KHF	180.00 , 10%	129.60	0.22	70.00	67.00	62.00	69.00	9.00
AIFS13A-R22KHF	220.00 , 10%	158.40	0.22	54.00	50.00	47.00	69.00	9.00
AIFS13A-R27KHF	270.00 , 10%	194.40	0.22	40.00	37.00	35.00	69.00	9.00
AIFS13A-R30KHF	300.00 , 10%	216.00	0.22	35.00	32.00	30.00	69.00	9.00

3. Mechanical Dimension(Unit:mm):

A	B	C	D	E	F	G	H	I
± 0.20	(Max.)	± 0.20	± 0.20	(Nom.)	± 0.15	± 0.25	Min.	Min.
8.00	10.80	9.00	10.80	6.30	2.50	2.30	0.90	5.75



Note:

- 1> Open Circuit Inductance (OCL) test condition:500KHz, 0.25Vrms, 0A_{dc} 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 as verified in the end application.

Third Angle Projection:

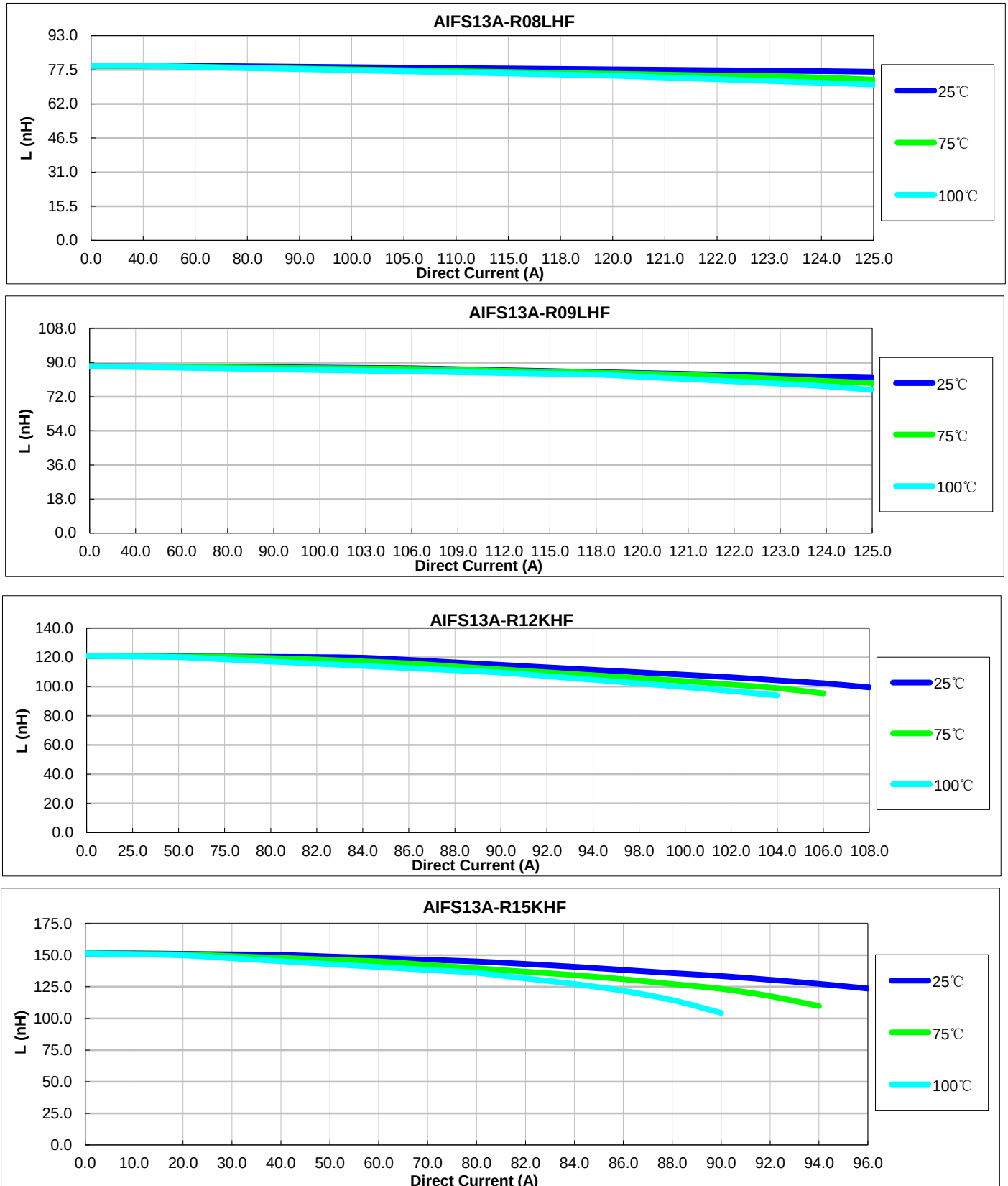




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4. Inductance Characteristics (Inductance vs. Current):





AIFS13A Series

Inductance vs. Current

