

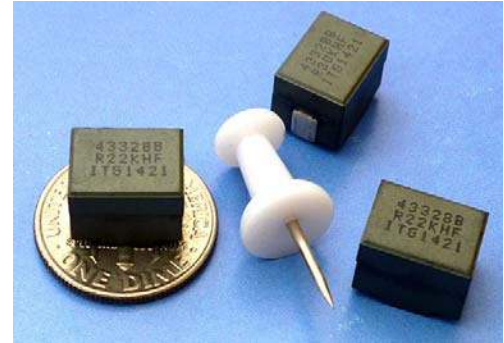


# AH43328B Series



## 1. Features of AH43328B Series :

- Ferrite based SMD Inductor with lower core loss.
- Inductance range: 105.0 nH to 300.0 nH , custom values are welcomed.
- High current output chokes, up to 107.0 Amp with approx. 20% roll off.
- Low Profile 7.90 mm typical Height .
- 11.10 x 8.10 mm Foot Print.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency up to 2 MHz application.
- Operating Temperature Range -55°C to + 130°C. RoHs & HF compliant .
- T & R Qty: 450 pcs , 13" Reel.

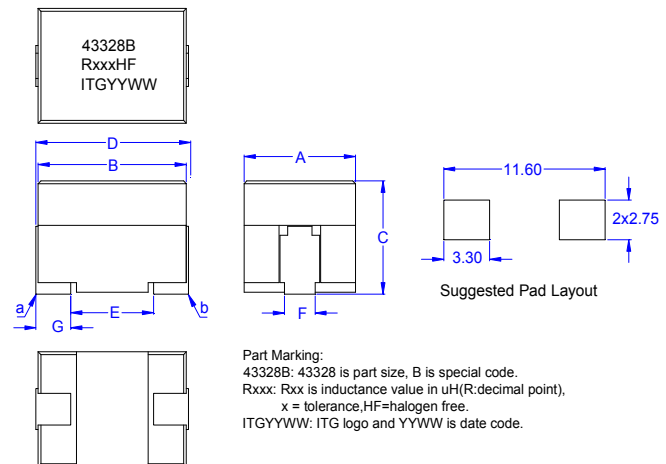


## 2. Electrical Characteristic of AH43328B Series:

Part Number	OCL <sup>1</sup> (nH) ± 10%	L@Isat1 <sup>2</sup> (nH) MIN.	DCR <sup>3</sup> (mΩ) ± 5.0%	Isat1 <sup>4</sup> (A) @25°C	Isat2 <sup>4</sup> (A) @75°C	Isat3 <sup>4</sup> (A) @100°C	Irms <sup>5</sup> (A) @25°C	Dim. C (mm) ± 0.20
AH43328B-R105KHF	105.00	75.60	0.195	107.00	103.00	100.00	70.00	8.10
AH43328B-R12KHF	120.00	86.40	0.195	103.00	99.00	94.00	70.00	8.00
AH43328B-R15KHF	150.00	108.00	0.195	86.00	83.00	80.00	70.00	7.90
AH43328B-R17KHF	170.00	122.40	0.195	76.00	73.00	70.00	70.00	7.90
AH43328B-R18KHF	180.00	129.60	0.195	71.00	68.00	65.00	70.00	7.90
AH43328B-R22KHF	220.00	158.40	0.195	56.00	53.00	51.00	70.00	7.90
AH43328B-R30KHF	300.00	216.00	0.195	36.00	33.00	32.00	70.00	7.90

## 3. Mechanical Dimension(Unit:mm):

A	B	C	D	E	F	G
± 0.20	± 0.20	(Max.)	± 0.20	(Nom.)	± 0.25	± 0.35
7.90	10.60	See table above	10.90	5.70	2.20	2.50



### Note:

- 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 as verified in the end application.

Third Angle Projection:

- New York 1 914 347 2474 ● Taipei 886 2 2698 8669 ● Kaohsiung 886 7 350 2275
- Tokyo 81 3 5829 8676 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767
- sales@inter-technical.com ● www.inter-technical.com Revision D: March 15, 2015

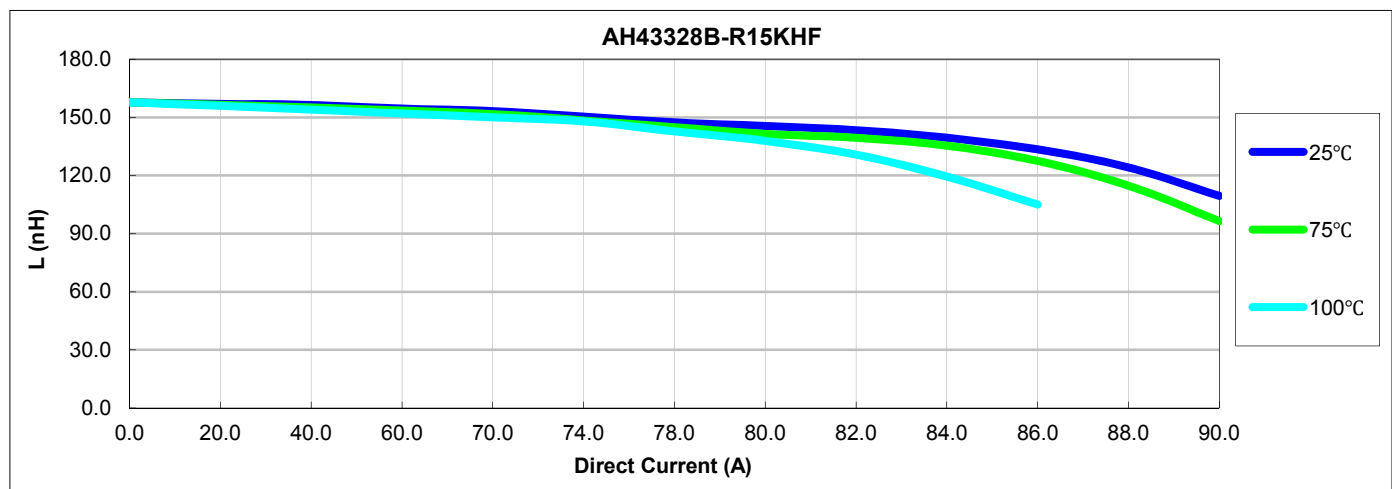
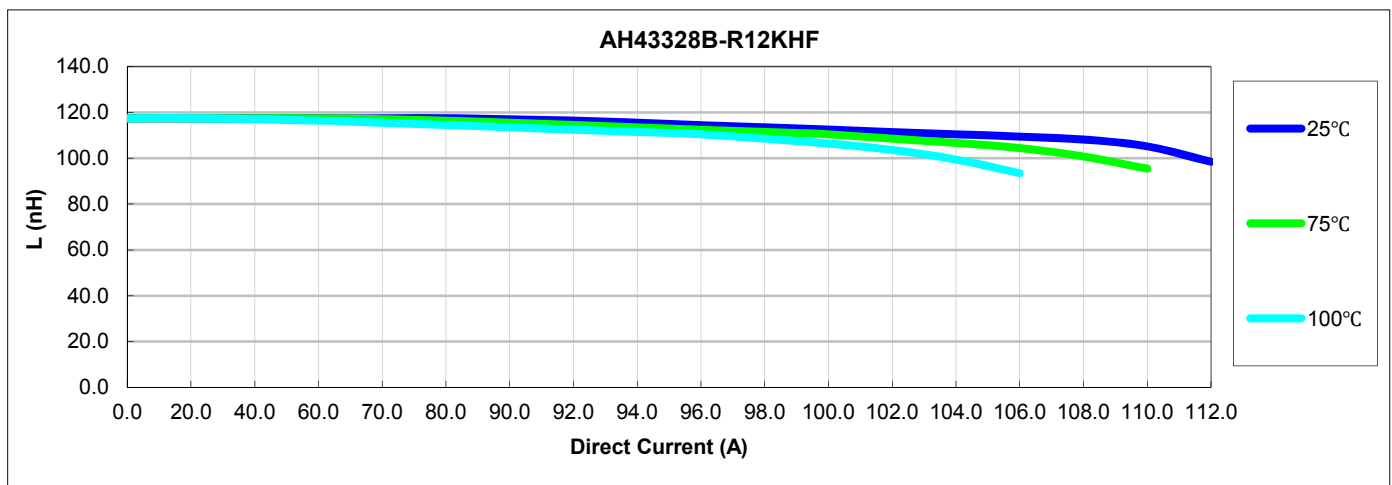
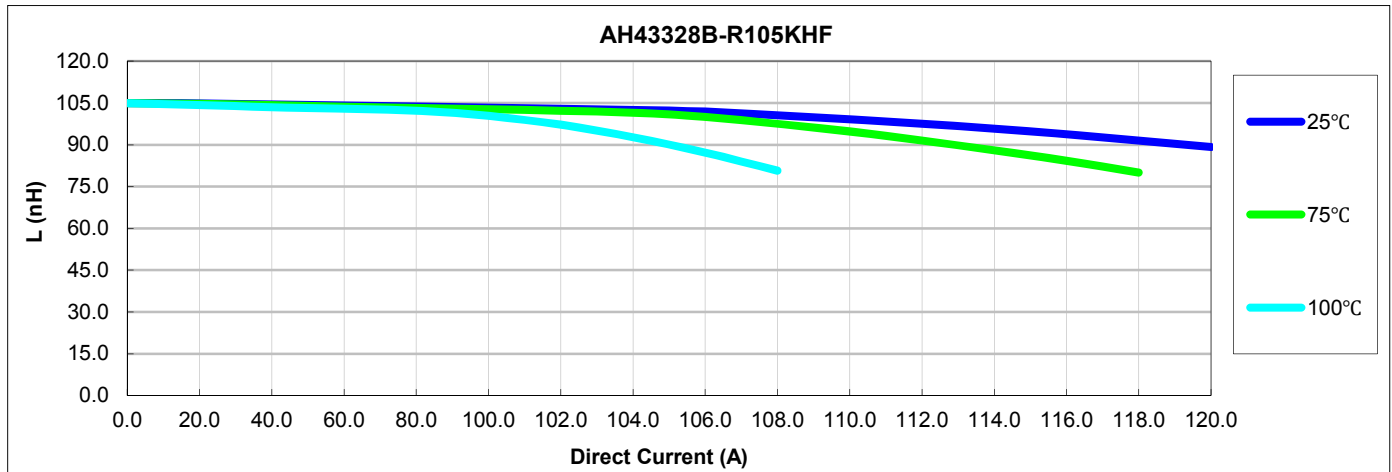


# AH43328B Series

## Inductance vs. Current



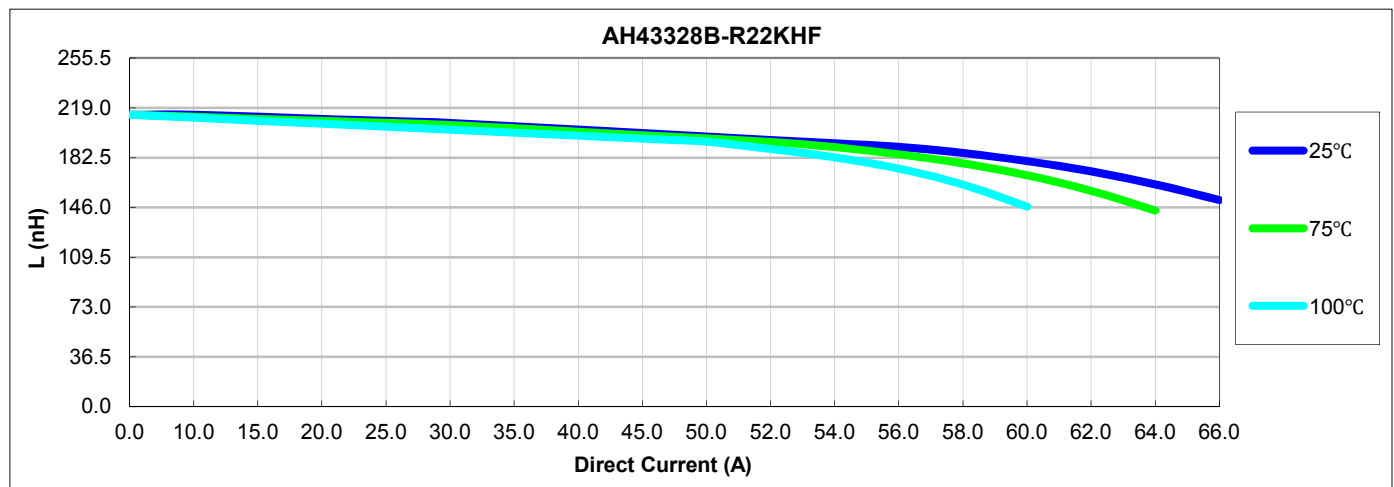
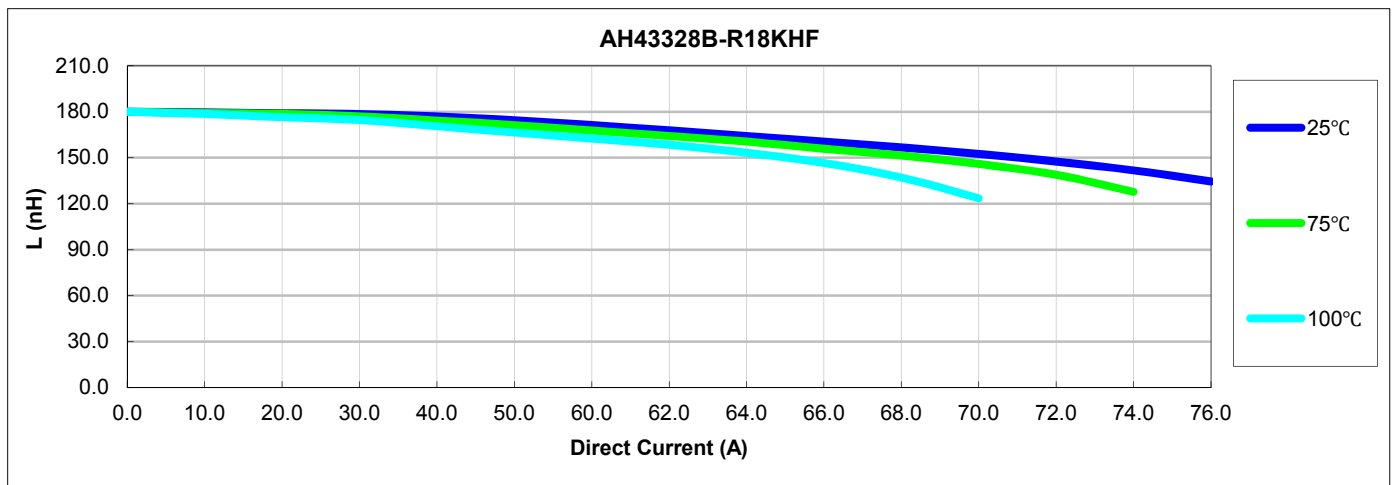
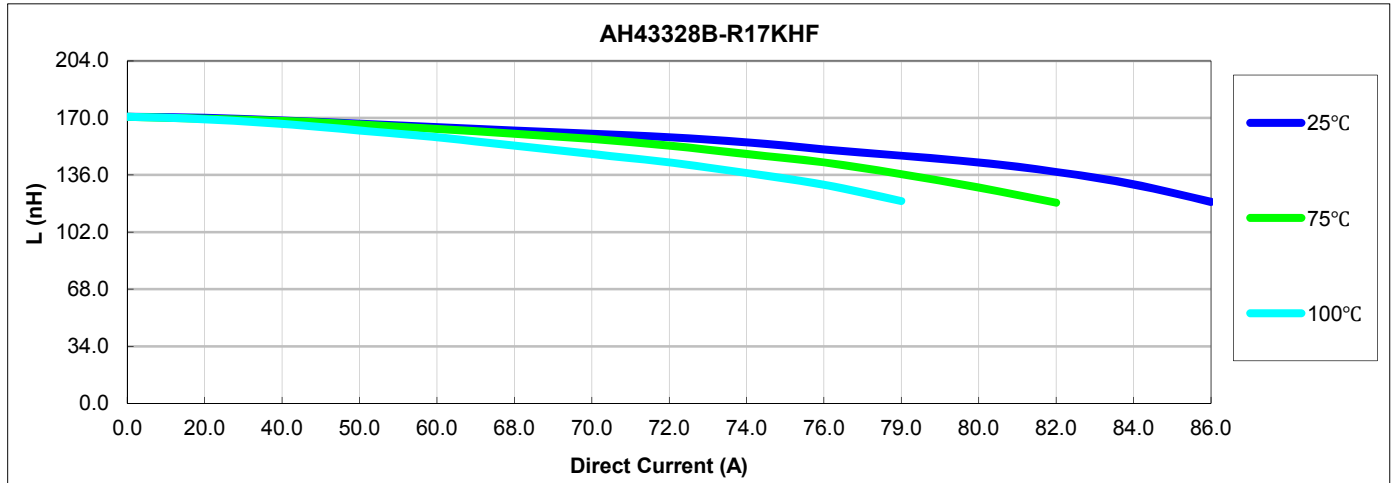
### 4. Inductance Characteristics (Inductance vs. Current):





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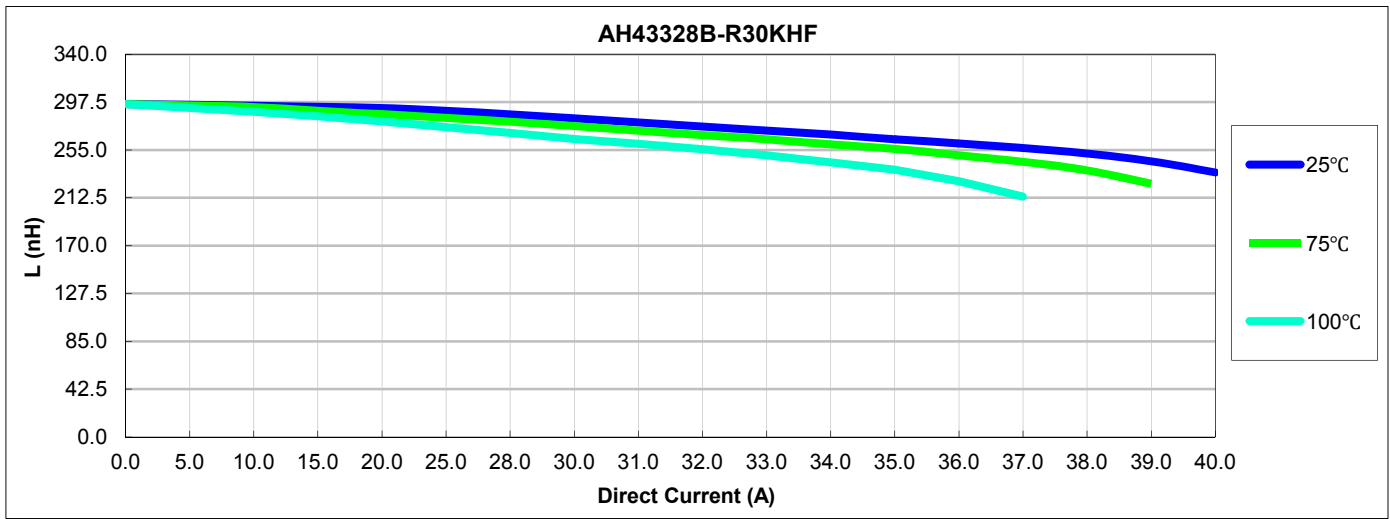
## Inductance vs. Current



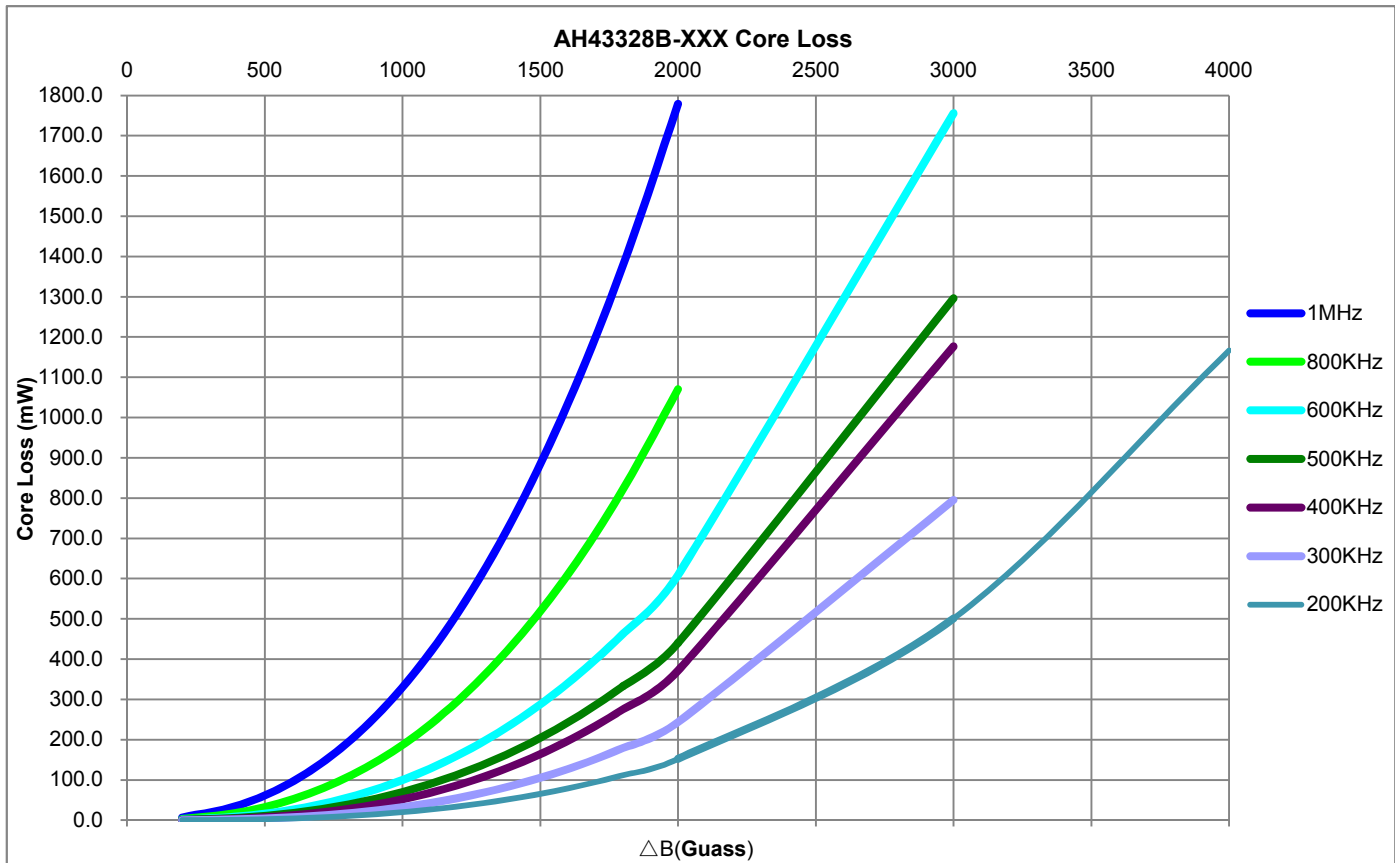


# AH43328B Series

## Inductance vs. Current



### 5. Core Loss:



Where  $\Delta B = 0.307 \cdot L(nH) \cdot \Delta I$