

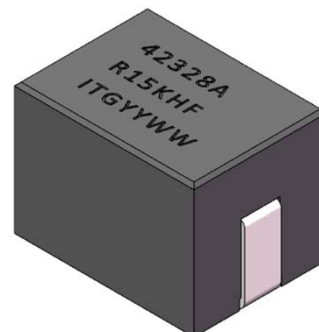


AH42328A Series



1. Features of AH42328A 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 100.0 Amp with approx. 20% roll off.
- Low profile 7.90mm / 7.80mm typical Height.
- 10.90 x 8.00 mm Foot Print.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency of up to 5.0MHz.
- Operating temperature range of -55° C to + 130° C.
- RoHS & HF compliant.
- T & R Qty's: 450pcs, 13" Reel.

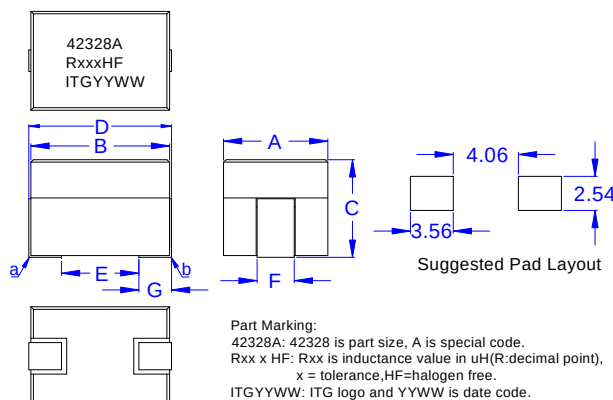


2. Electrical Characteristics of AH42328A Series:

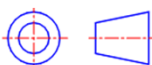
ITG Part Number	OCL ¹ (nH) ± 10%	L@Isat1 ² (nH) MIN.	DCR ³ (mΩ) ± 5.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Irms ⁵ (A) @25°C	Dim. C (mm) ± 0.20
AH42328A-R12KHF	120.00	86.00	0.18	100.00	97.00	92.00	73.00	7.90
AH42328A-R15KHF	150.00	106.00	0.18	81.00	78.00	73.00	73.00	7.80
AH42328A-R17KHF	170.00	122.40	0.18	71.00	68.00	64.00	73.00	7.80
AH42328A-R18KHF	180.00	129.60	0.18	66.00	64.00	60.00	73.00	7.80
AH42328A-R22KHF	220.00	158.40	0.18	58.00	54.00	52.00	73.00	7.80
AH42328A-R27KHF	270.00	194.00	0.18	37.00	35.00	34.00	73.00	7.80
AH42328A-R30KHF	300.00	216.00	0.18	33.00	31.00	30.00	73.00	7.80

3. Mechanical Dimension of AH42328A Series:

A	B	C	D	E	F	G
±0.20	±0.20	±0.20	±0.20	Nom.	±0.25	±0.35
7.80	10.40	See table above	10.70	5.70	2.15	2.50



Third Angle Projection:



Notes:

1. Open Circuit Inductance (OCL) test condition: 500KHz, 0.25Vrms, 0A DC at 25°C.
2. L @ Isat and L @ Irms Test condition: 500KHz, 0.25Vrm (Ta=25°C).
3. The nominal DCR is measured from point "a" to point "b" as shown above in 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.
6. It is recommended the part temperature not exceed 130° C under worst case operating conditions as 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
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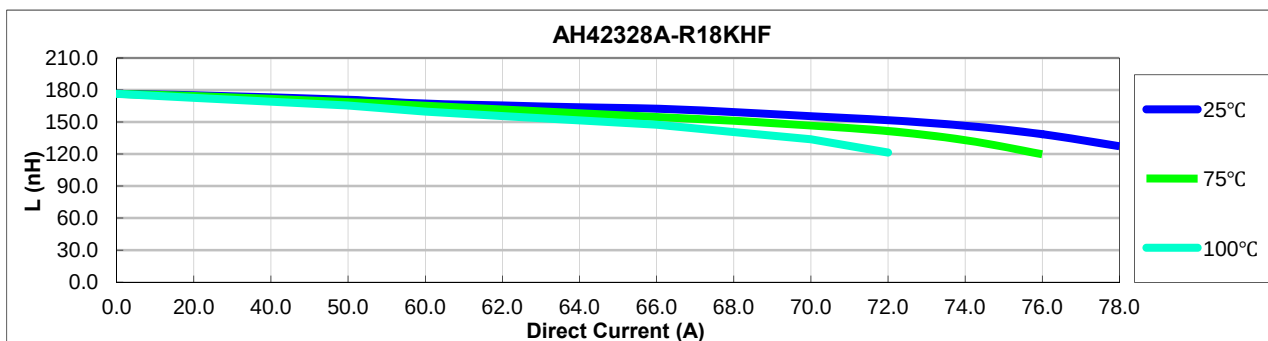
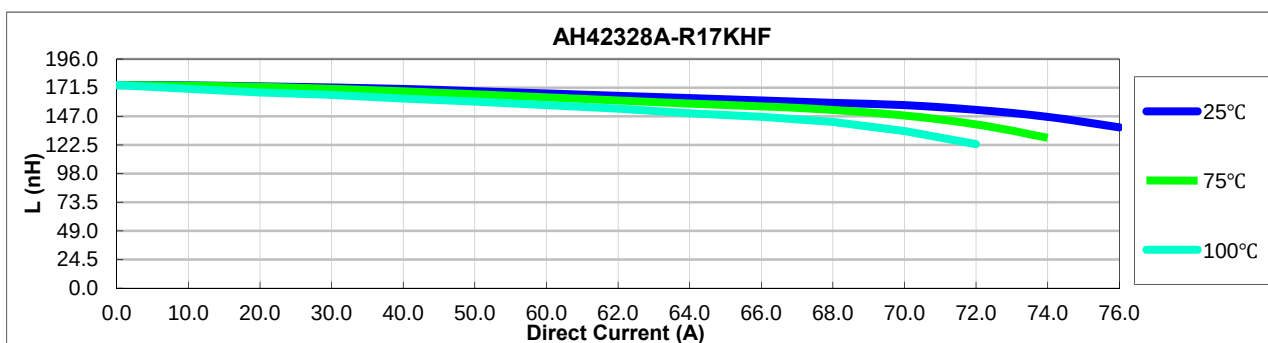
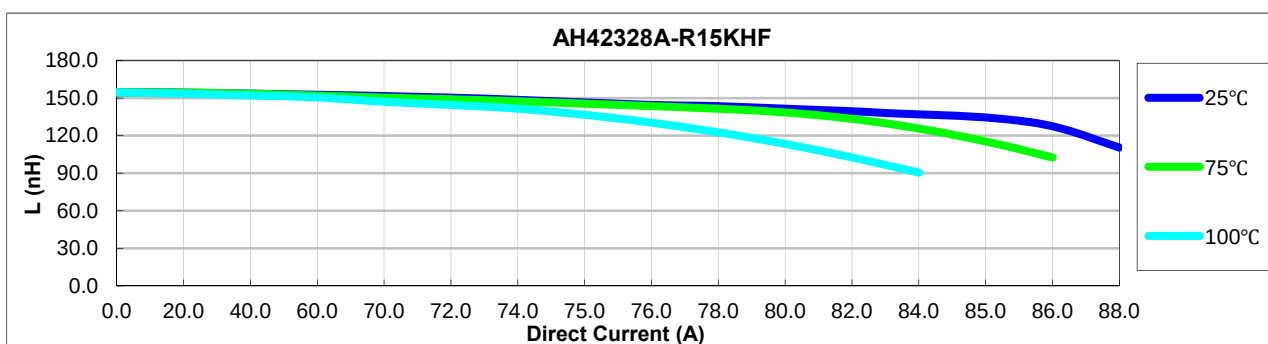
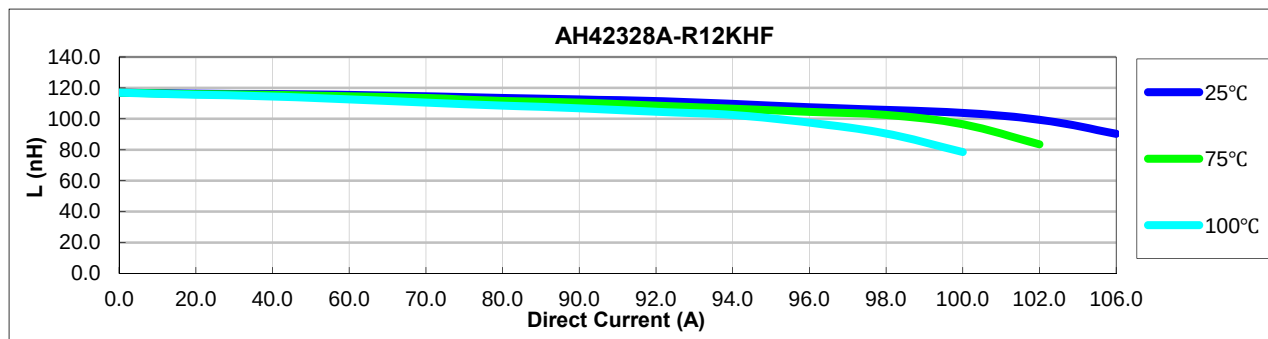
*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



AH42328A Series



4. Inductance Characteristics of AH42328A Series (Inductance vs Current):



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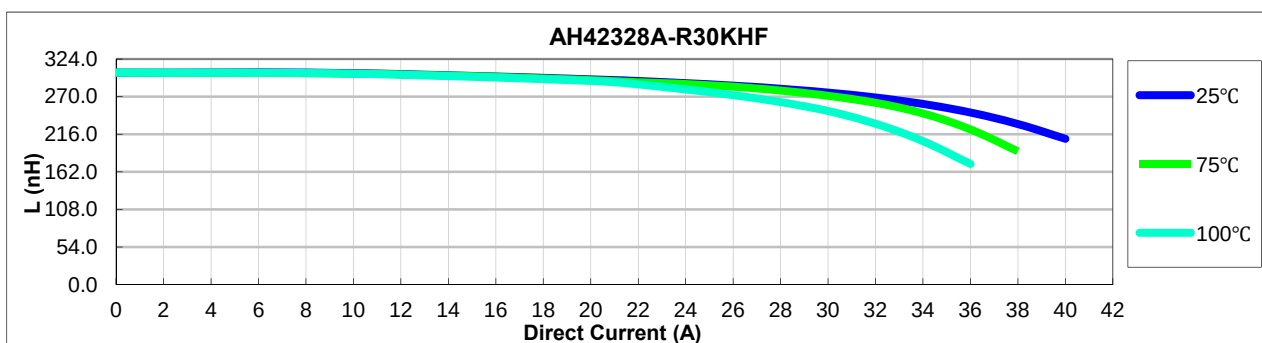
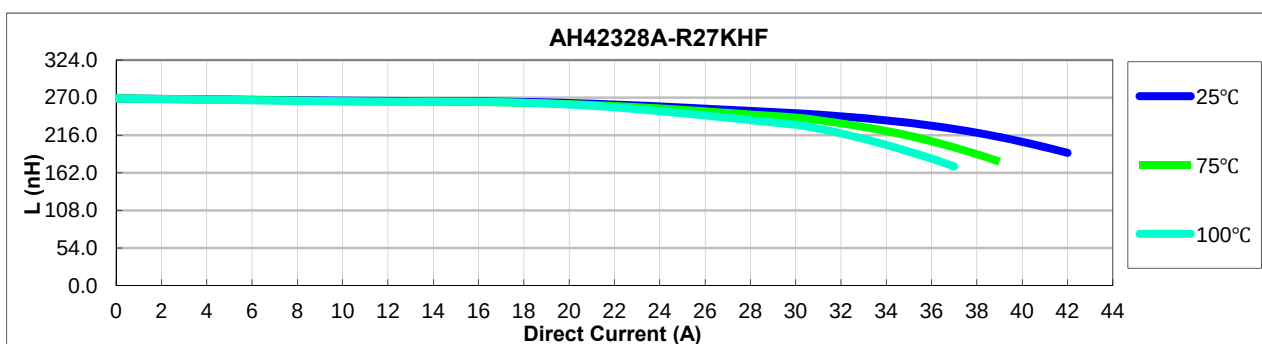
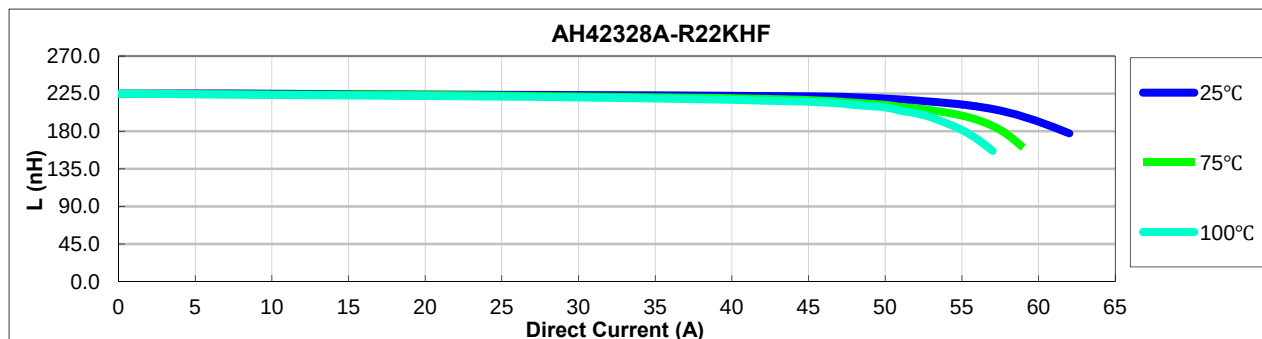
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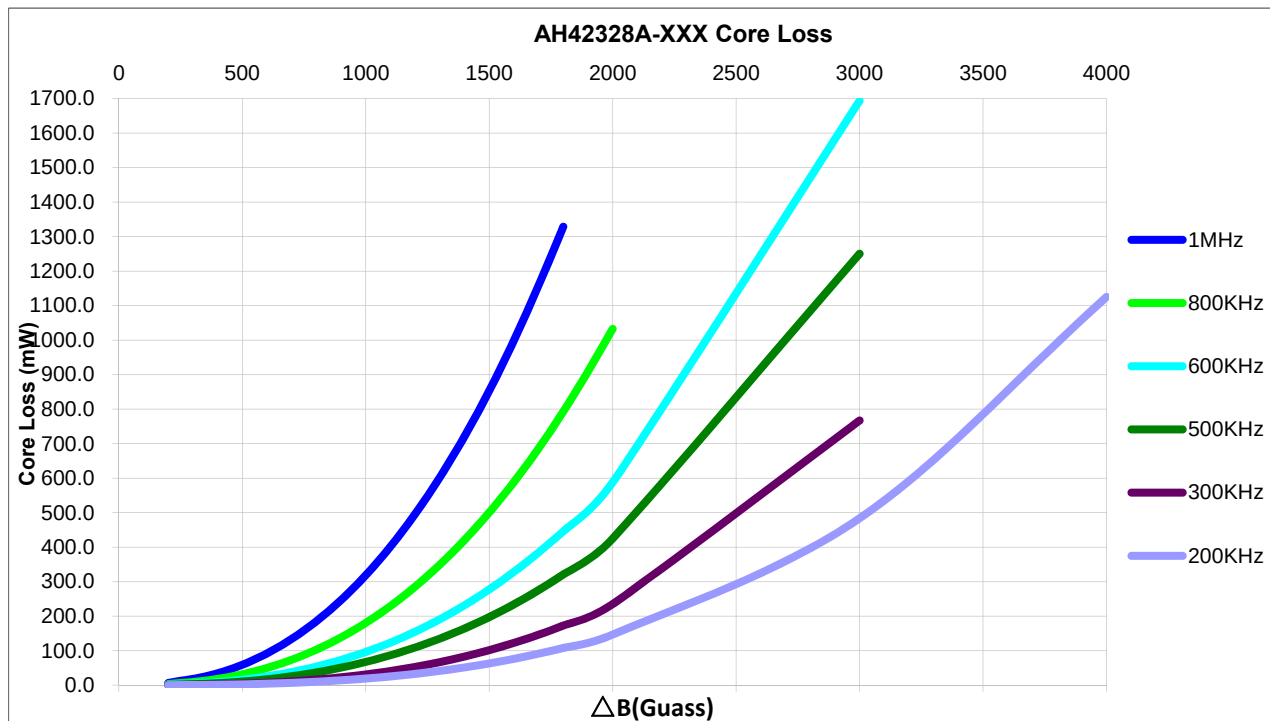
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5. Core Loss:



Where $\Delta B = 0.324 \cdot L(nH) \cdot \Delta I$

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