

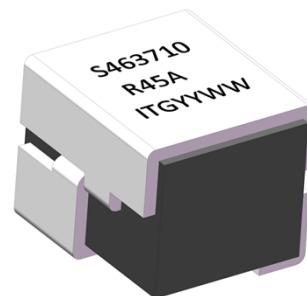


SLM463710 Series



1. Features of SLM463710 Series:

- Ferrite based SMD inductor with lower core loss.
- Inductance range: 0.22 uH to 1.30 uH , custom values are welcomed.
- High current output chokes of up to 96.0 Amp with approx. 20% roll off.
- Low profile 9.50/9.80 mm Max. height .
- 10.40 x 11.70 mm Max. 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: 250pcs, 13" Reel.

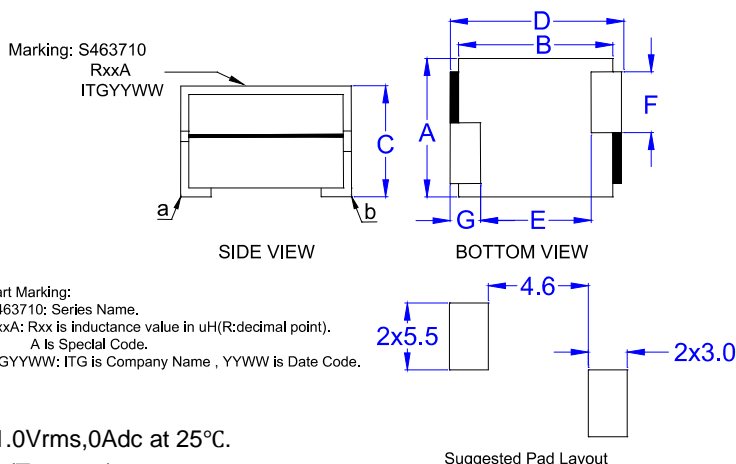


2. Electrical Characteristics of SLM463710 Series:

ITG Part Number	OCL ¹ (uH) ± 20%	L @ Isat1 ² (uH) Min. @25°C	DCR ³ (mΩ) ± 8.0%	Isat1 ⁴ (A) @25°C	Isat2 ⁴ (A) @75°C	Isat3 ⁴ (A) @100°C	Irms ⁵ (A) @25°C	Dim.C (mm) Max.
SLM463710A-R22MHF	0.220	0.141	0.35	96.00	87.00	80.00	40.00	9.80
SLM463710A-R35MHF	0.350	0.224	0.35	65.00	60.00	56.00	40.00	9.50
SLM463710A-R40MHF	0.400	0.256	0.35	54.00	50.00	45.00	40.00	9.50
SLM463710A-R45MHF	0.450	0.288	0.35	51.00	47.00	42.00	40.00	9.50
SLM463710A-R52MHF	0.525	0.336	0.35	41.00	38.00	33.00	40.00	9.50
SLM463710A-R60MHF	0.600	0.384	0.35	37.00	34.00	31.00	40.00	9.50
SLM463710A-1R0MHF	1.000	0.640	0.35	19.00	18.00	16.00	40.00	9.50
SLM463710A-1R2MHF	1.200	0.768	0.35	15.00	14.00	13.00	40.00	9.50
SLM463710A-1R3MHF	1.300	0.832	0.35	12.00	11.00	10.00	40.00	9.50

3. Mechanical Dimension of SLM463710 Series:

A Max.	B Max.	C Max.	D Max.	E Nom.	F Nom.	G Nom.
11.70	8.70	See table above	10.40	5.10	5.00	2.50



Note:

1. Open Circuit Inductance (OCL) test condition: 100KHz,1.0Vrms,0A_{dc} 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 & 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.

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 ● Japan 81 568 85 2830 ● Shenzhen 86 755 8418 6263 ● Shanghai 86 21 5424 5141 ● Hong Kong 852 9688 9767
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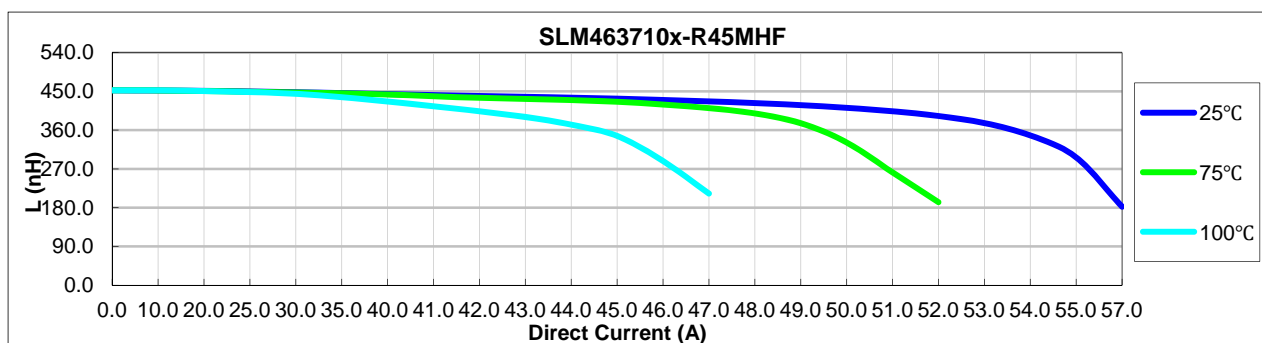
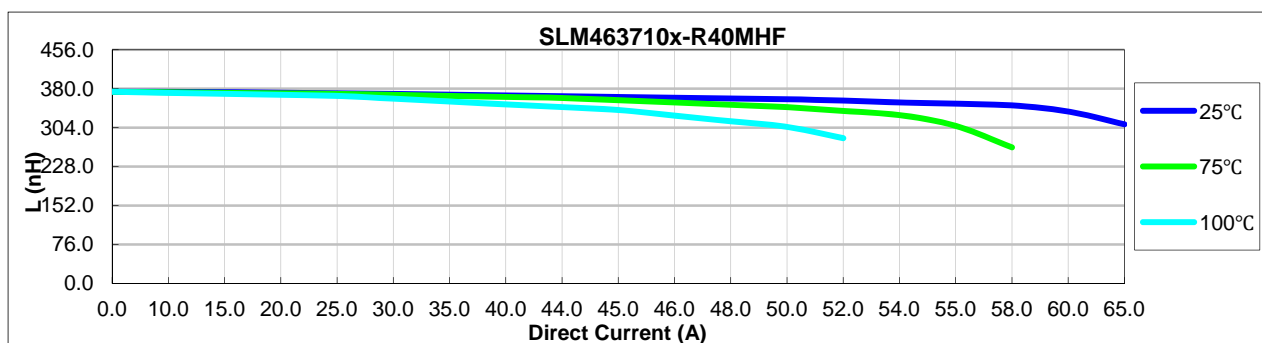
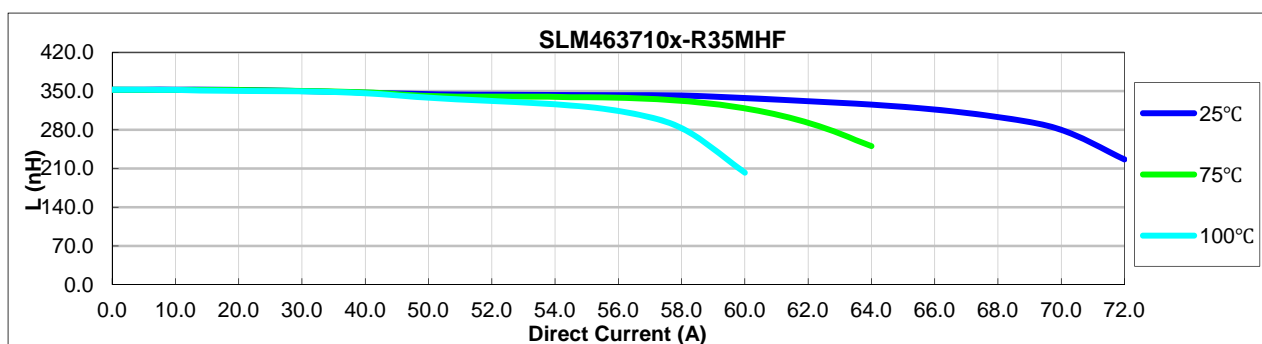
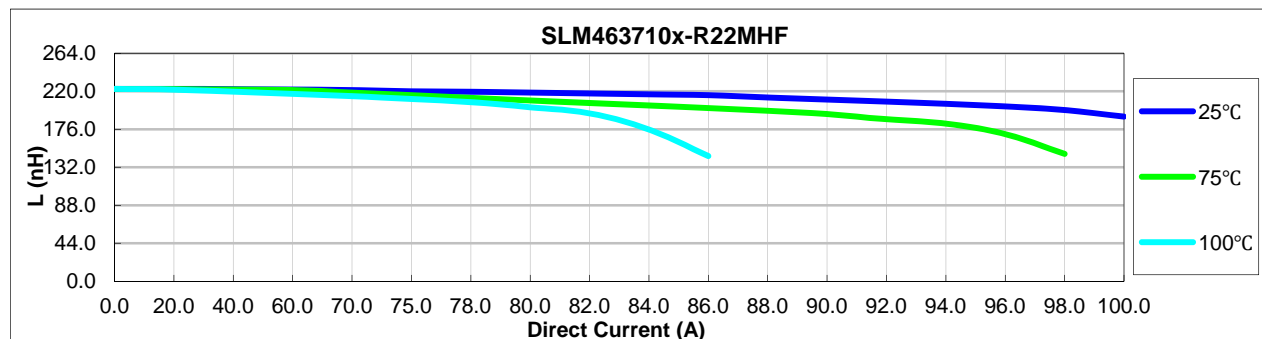
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4. Inductance Characteristics of SLM463710 Series (Inductance vs Current):



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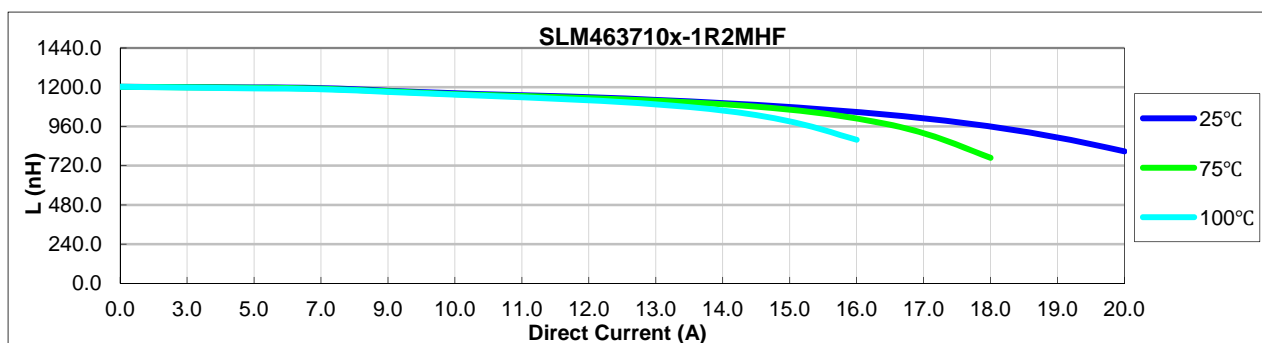
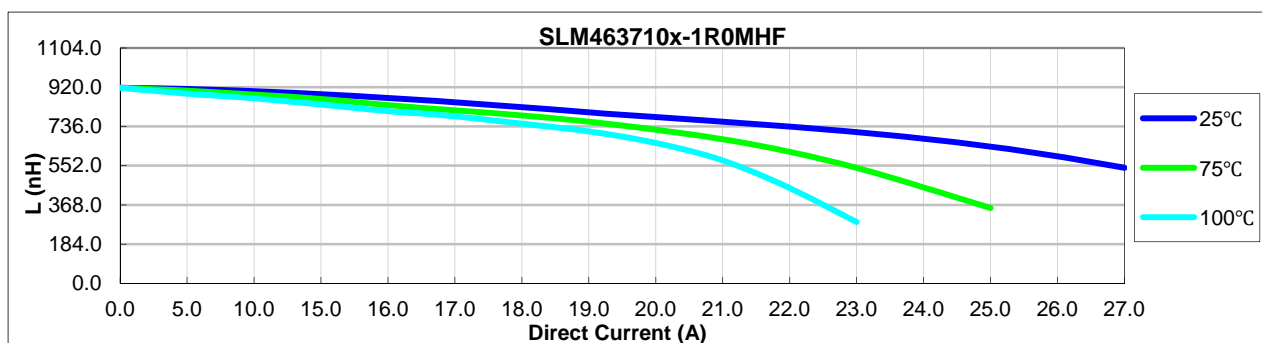
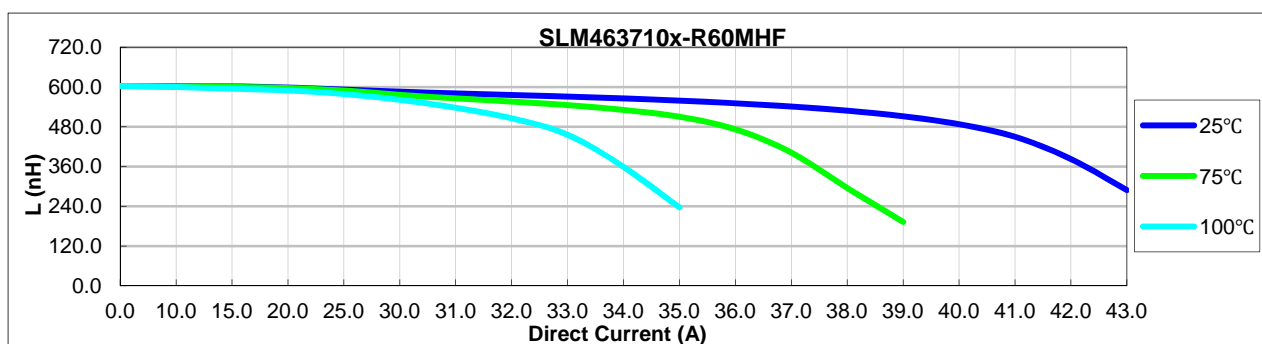
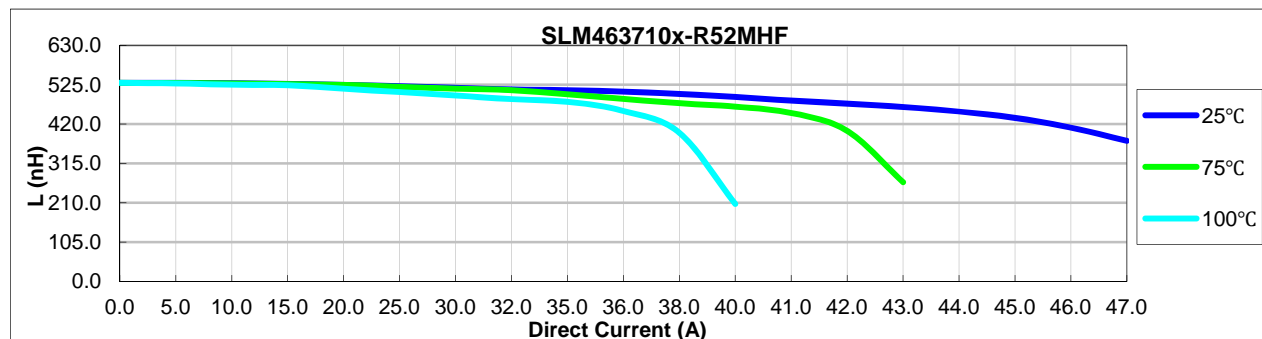
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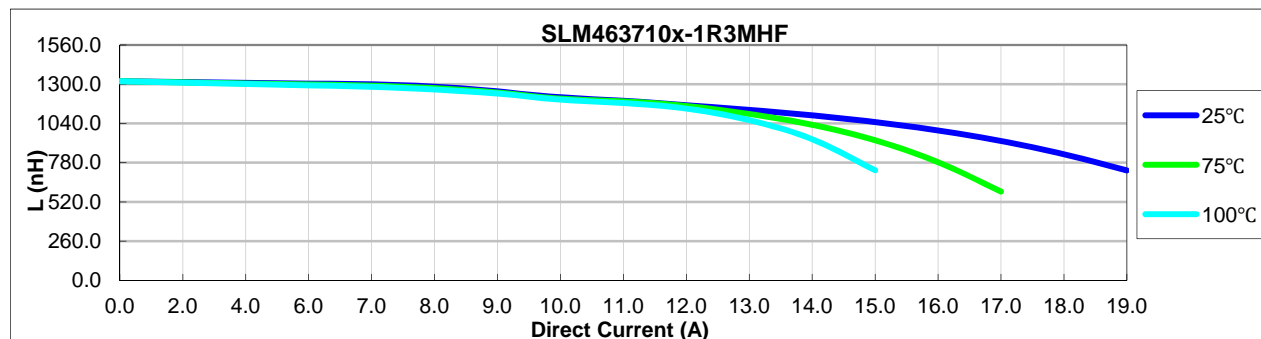
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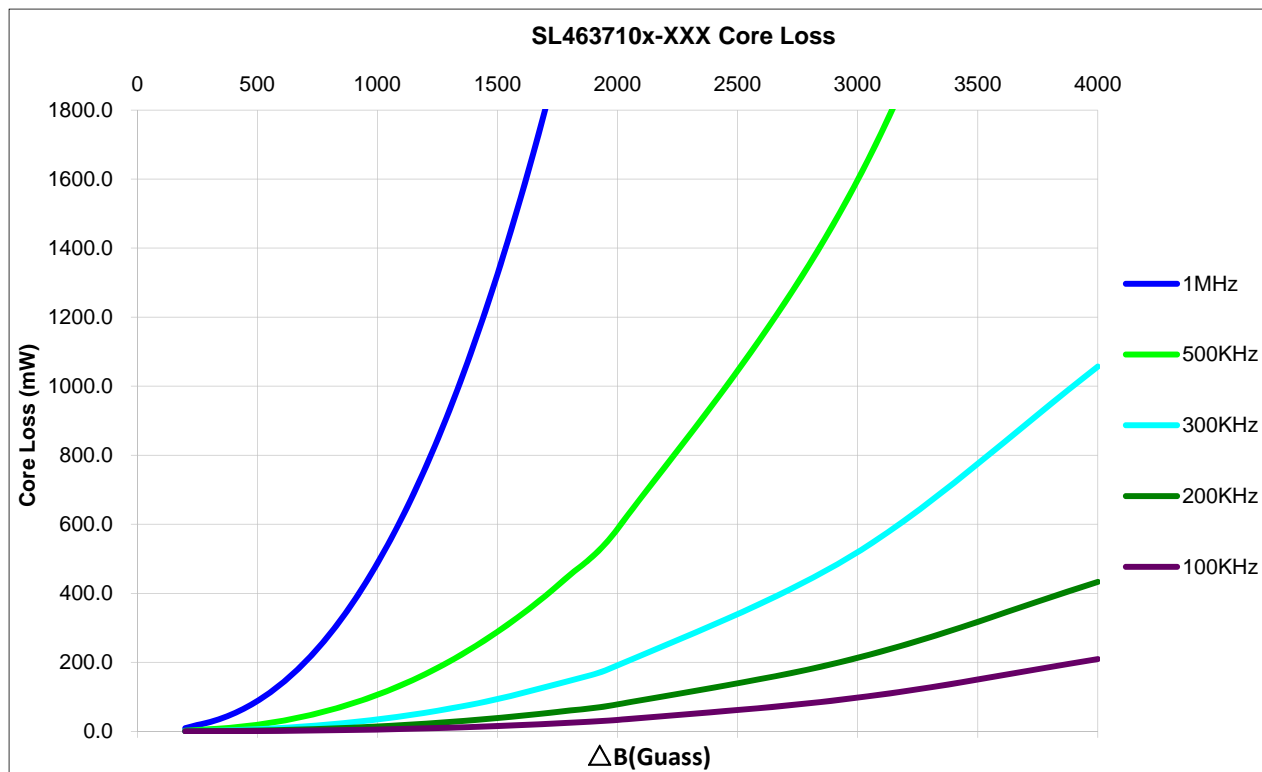
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4. Inductance Characteristics of SLM463710 Series (Inductance vs Current):



5. Core Loss:



Where $\Delta B = 0.184 * L(nH) * \Delta I$

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