



Hologen Free

SQ4120 Series



1. Features of SQ4120 Series:

- Ferrite based SMD inductor with lower core loss.
- Inductance range: 0.62uH to 1.5 uH, custom values are welcomed.
- High current output chokes up to 23.0 Amp with approx. 20% roll off.
- Low profile 5.00 mm Max. height.
- 8.10 x 10.30 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: 950pcs, 13" Reel.

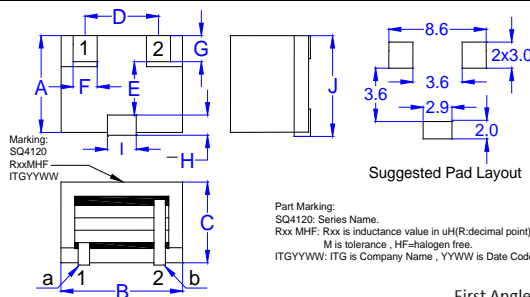


2. Electrical Characteristics of SQ4120 Series:

ITG Part Number	OCL ¹	DCR ³	DCR ³	Isat1 ⁴	Isat2 ⁴	Irms ⁵
	(uH) ±20%	(mΩ) Typical	(mΩ) Max	(A) @25°C	(A) @100°C	(A) @25°C
SQ4120-R62MHF	0.62	0.95	1.10	23.00	19.00	23.00
SQ4120-R72MHF	0.72	0.95	1.10	19.00	16.00	23.00
SQ4120-R82MHF	0.82	0.95	1.10	15.00	13.50	23.00
SQ4120-R90MHF	0.90	0.95	1.10	14.50	13.00	23.00
SQ4120-1R0MHF	1.00	0.95	1.10	12.50	10.50	23.00
SQ4120-1R2MHF	1.20	0.95	1.10	10.00	9.00	23.00
SQ4120-1R5MHF	1.50	0.95	1.10	8.00	7.00	23.00

3. Mechanical Dimension of SQ4120 Series:

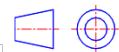
A	B	C	D	E	F	G	H	I	J
Max.	Max.	Max.	Nom.	Nom.	Ref.	Nom.	Nom.	Nom.	Max.
8.10	10.30	5.00	6.00	4.20	1.80	2.30	1.30	2.40	8.20



Notes:

1. Open Circuit Inductance (OCL) test condition: 100KHz , 0.1Vrms,0A_{dc} at 25°C.
2. L @ Isat and L @ Irms Test condition: 100KHz , 0.1Vrms (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 : 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.

First Angle Projection:



● 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 A.1: August 09, 2021

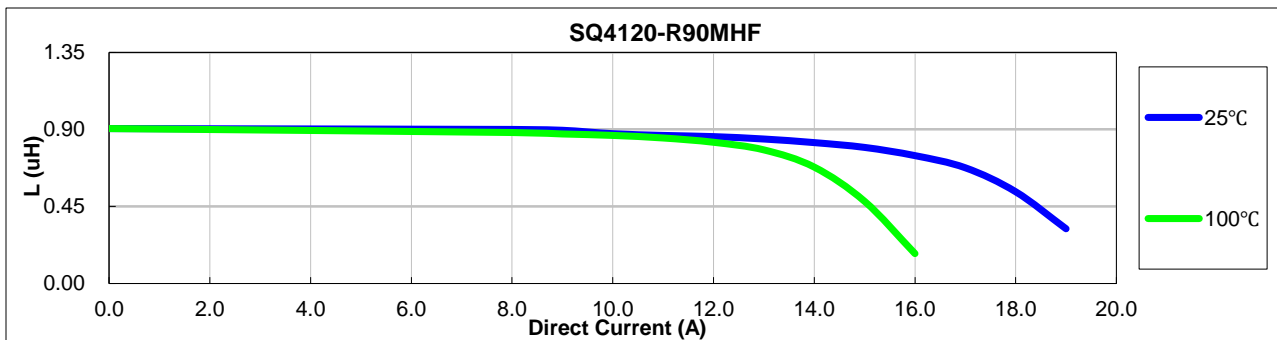
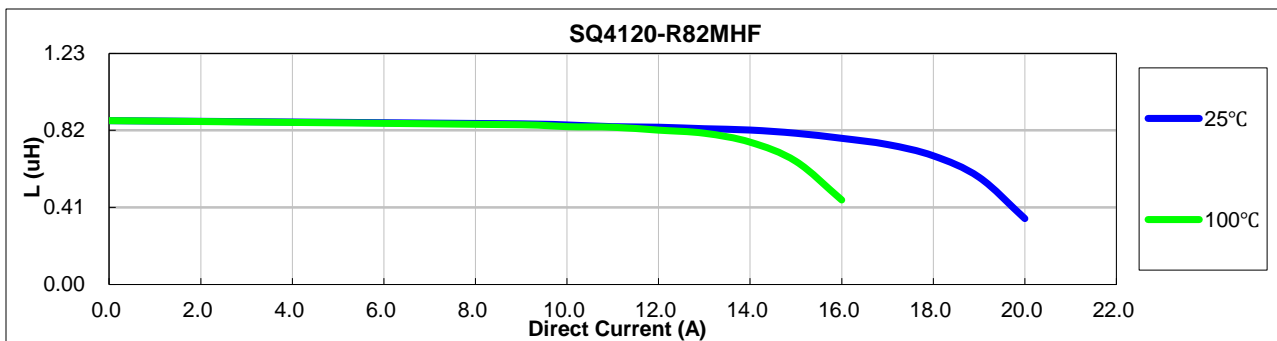
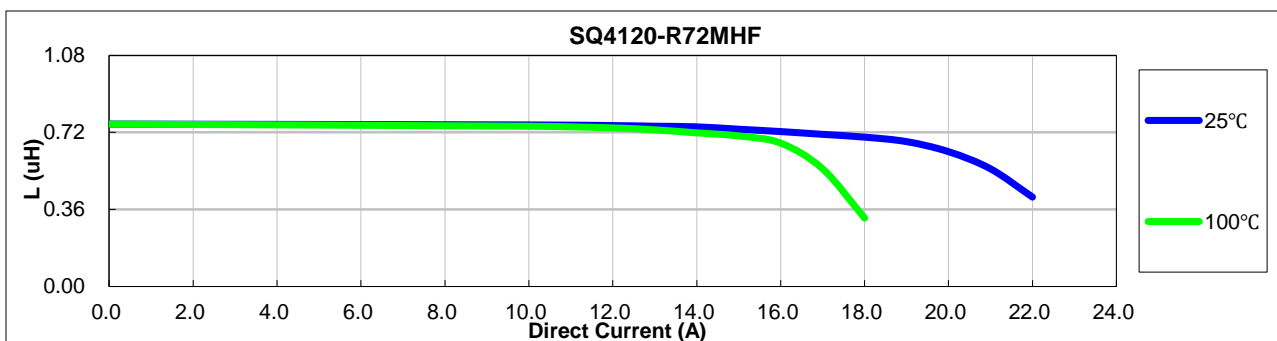
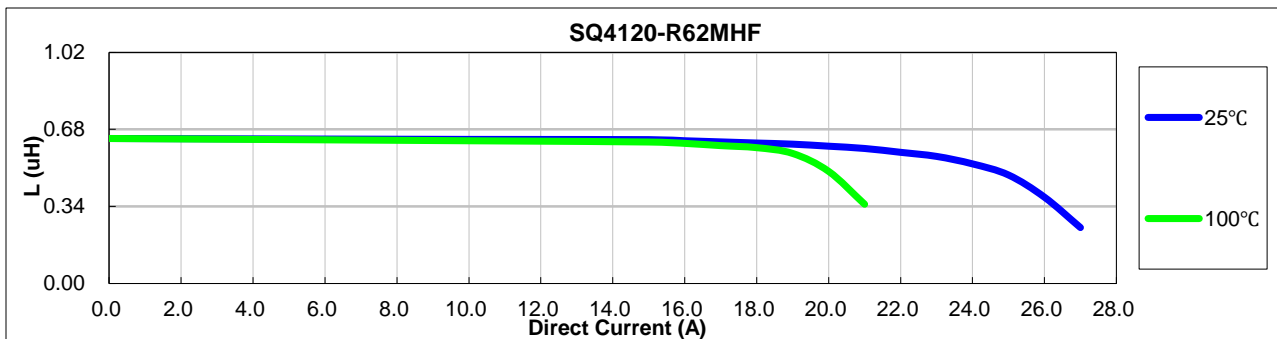
*Due to continuous product improvement, all specifications are subject to change without prior notice. Kindly contact an ITG field application engineer or a sales representative prior to purchase.



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4. Inductance Characteristics of SQ4120 Series (Inductance vs Current):



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