



Hologen Free

SC5024 Series



1. Features of SC5024 Series :

- Alloy powder based SMD Inductor with lower core loss.
- Flat wire windings provide extremely low DC and AC resistance.
- Inductance Range: 0.96uH to 3.30 uH , custom values are welcomed.
- High current output chokes, up to 37.0 Amp with approx. 30% roll off.
- Ideal for DC to DC converter, VRM & high density Board Design.
- Foot Print 13.0 x 14.0mm max. , 6.0mm max. Height.
- Operating Temperature Range: -55°C to + 150°C.
- T & R Qtys: 500 pcs , 13" Reel with plastic tape 24mm wide and 16mm pocket spacing.
- RoHs & HF compliant.

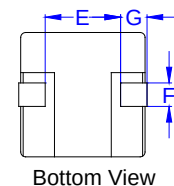
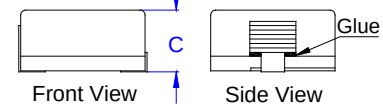
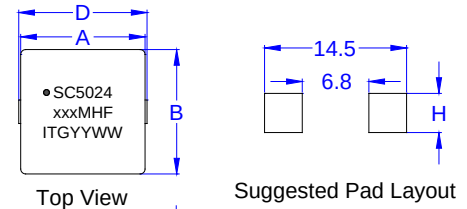


2. Electrical Characteristics of SC5024 Series:

ITG Part Number	OCL ¹ (uH) ± 20%	DCR (mΩ) ±7% @25°C	Isat ² (A) @25°C	L@Isat (uH) Typ.	Irms ³ (A) @25°C	L@Irms (uH) Typ.	Dim. F (mm) Nom.	Dim. H (mm) Ref.
SC5024-R47MHF	0.47	0.75	37.00	0.398	35.50	0.404	4.20	5.00
SC5024-R90MHF	0.90	1.35	27.00	0.770	26.50	0.774	3.05	4.00
SC5024-1R5MHF	1.50	2.18	21.00	1.22	21.00	1.22	3.05	4.00
SC5024-2R2MHF	2.20	2.95	17.00	1.88	18.00	1.85	2.40	3.20
SC5024-3R1MHF	3.10	4.40	14.50	2.67	14.50	2.67	2.40	3.20
SC5024-4R2MHF	4.20	6.85	12.50	3.58	11.50	3.63	2.40	3.20
SC5024-5R4MHF	5.40	7.70	11.00	4.59	11.00	4.59	2.40	3.20

3. Mechanical Dimension of SC5024 Series (Unit:mm):

A	B	C	D	E	F	G	H
± 0.40	± 0.40	Max.	Max.	Ref.	Nom.	Ref.	Ref.
12.60	12.60	6.00	14.00	7.50	See table above	2.70	See table above



Part Marking:
SC5024: Series Name.
" • " The long pin is the beginning of winding.
xxx: inductance value in uH(R:decimal point),
M is tolerance, HF is halogen free.
ITG is Company Name and YYWW is Date Code.



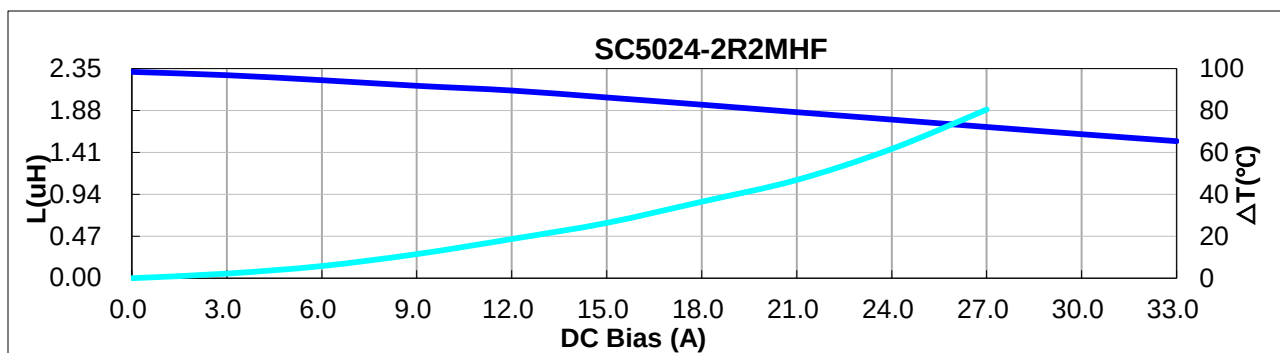
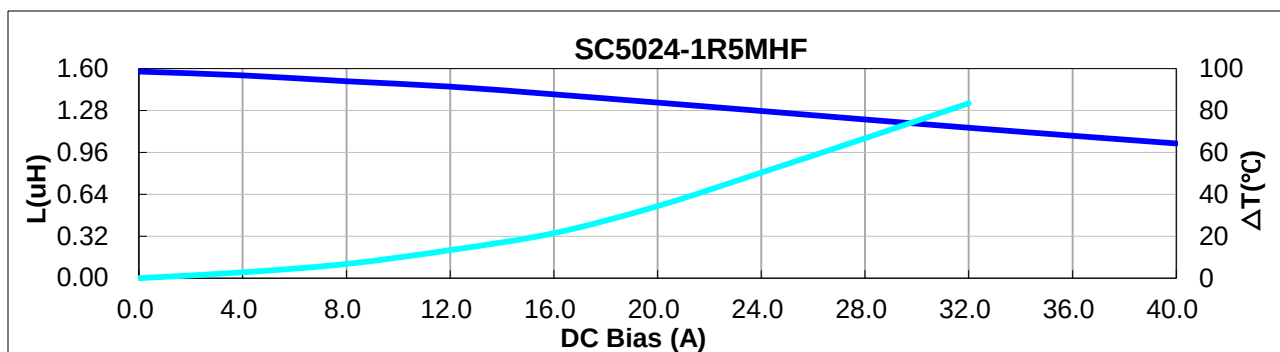
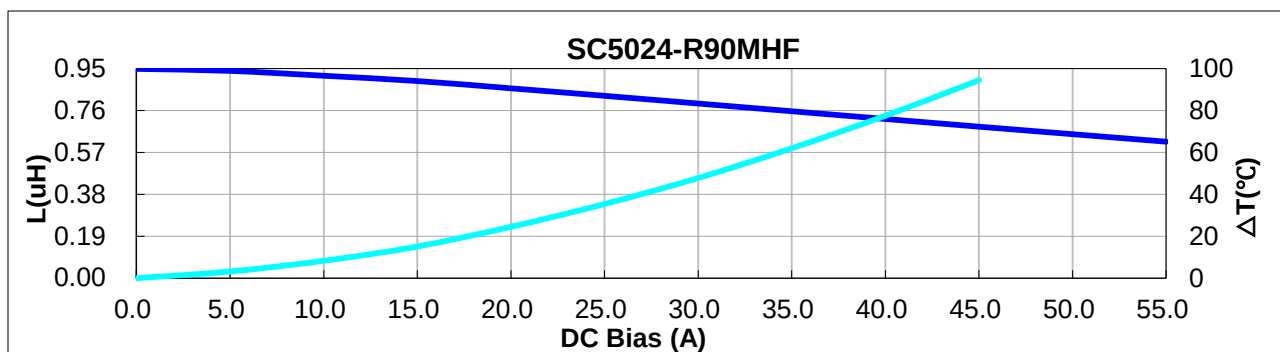
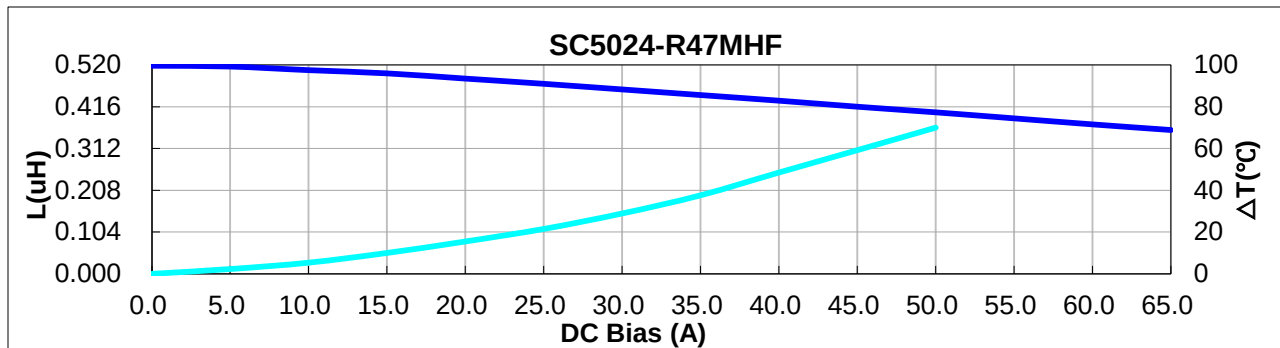
Notes:

1. Open Circuit Inductance (OCL) and L@Irms and L@Isat are measured at 300KHz, 0.25V@ 25°C.
2. Isat: DC current that causes inductance to drop by approximately 20% from OCL (Ta=25°C).
3. Irms: DC current that causes an approximate temperature rise (ΔT) of 40°C without core loss (Ta=25°C).

● 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.0: Jan. 7, 2020

*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.

4. Inductance vs. Current vs. Temperature Rise Characteristics of SC5024 Series :



4. Inductance vs. Current vs. Temperature Rise Characteristics of SC5024 Series :

