

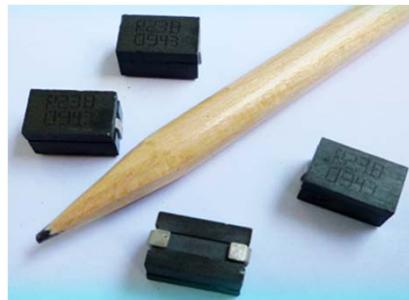


SL47307 Series



1. Features:

- Ferrite based SMD Inductor with lower core loss.
- Inductance Range: 150mH to 400mH. Custom values are welcomed.
- High current output chokes, upto 88 Amp with about 20% roll off.
- Low Profile 7.5mm Max. height .
- Foot Print 12.1 x 7.2 mm Max.
- Ideal for Buck Converter, VRM & High Density Board Design.
- Operating frequency up to 1 MHz application.
- Operating Temperature Range -55°C to + 130°C , RoHs compliance ;



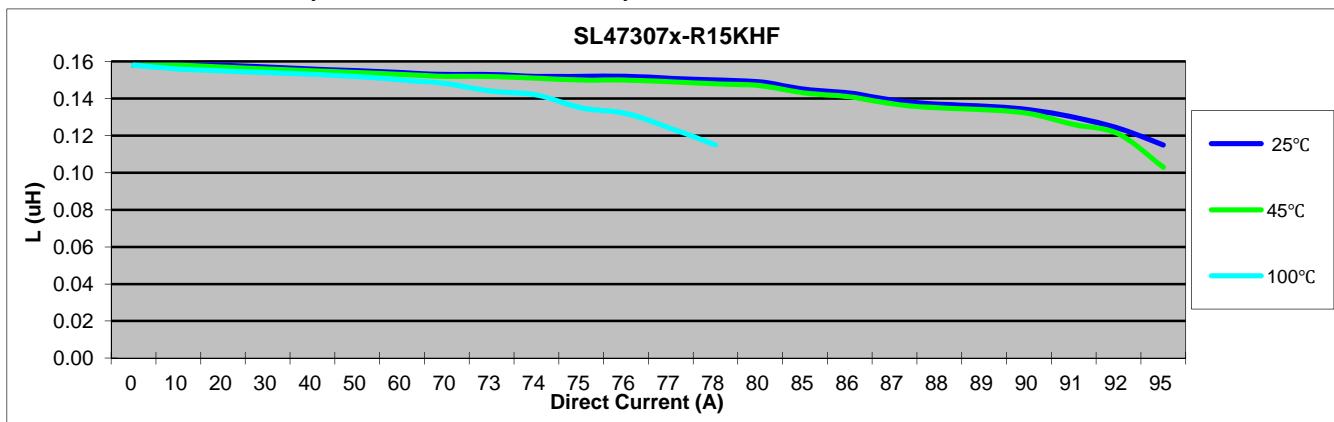
2. Electrical Characteristic of SL47307 Series:

Part Number	Inductance (uH)	DCR (mΩ)	I _{sat} ¹ @25°C	I _{sat} ² @45°C	I _{sat} ³ @100°C	I _{rms} ⁴ (A)
	10% or 15%	±7%				
SL47307A-R15KHF	0.15 , 10%	0.29	88	87	74	57
SL47307B-R15KHF	0.15 , 10%	0.48	88	87	74	44
SL47307A-R18KHF	0.18 , 10%	0.29	69	65	60	57
SL47307B-R18KHF	0.18 , 10%	0.48	69	65	60	44
SL47307A-R23KHF	0.23 , 10%	0.29	60	52	47	57
SL47307B-R23KHF	0.23 , 10%	0.48	60	52	47	44
SL47307A-R30LHF	0.30 , 15%	0.29	39	38	34	57
SL47307B-R30LHF	0.30 , 15%	0.48	39	38	34	44
SL47307A-R40LHF	0.40 , 15%	0.29	27	26	25	57
SL47307B-R40LHF	0.40 , 15%	0.48	27	26	25	44

Note:

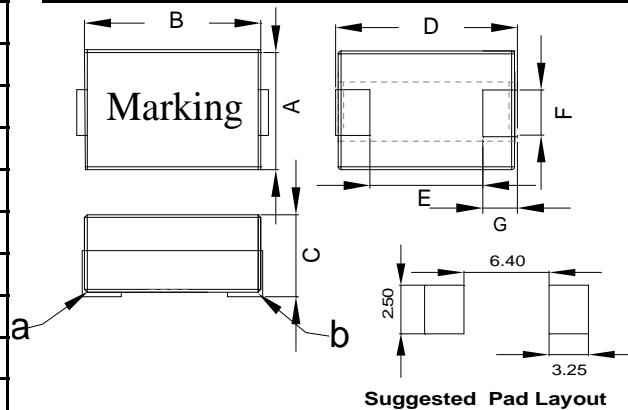
1. Open Circuit Inductance (OCL) test condition:100KHz,0.1Vrms,0Adc ,at 25°C.
2. Full Load Inductance (FLL) Test condition:100KHz,0.1Vrms ,I_{sat};(Ta=25°C).
3. I_{sat}¹,I_{sat}² & I_{sat}³: DC current that will cause inductance to drop approximately by 20% ;(Ta=25°C).
4. I_{rms}: DC current for an approximate 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 verified in the end application.
5. The nominal DCR is measured from point "a" to point "b",as shown above on the mechanical drawing.

4. Inductance Characteristics (Inductance vs. Current):



3. Mechanical Dimension(Unit:mm):

A Max.	B Max.	C Max.	D Max.	E Nom.	F Nom.	G Nom.
7.2	11.7	7.5	12.1	7.1	2.05	2.5





SL47307 Series

Inductance vs. Current

