

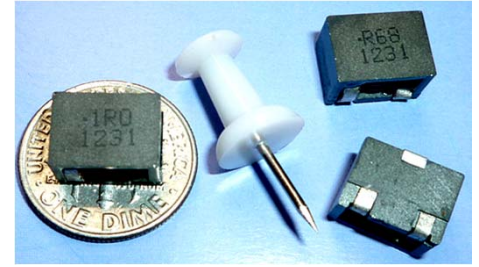


SQ4126 Series



1. Features:

- Ferrite based SMD Inductor with lower core loss.
- Inductance Range:0.42uH to 10.00uH,Custom values are welcomed.
- High current output chokes, upto 45.0 Amp with approx. 20% roll off.
- Low Profile 6.65mm Max. height .
- Foot Print 8.10 x 10.30 mm Max.
- Ideal for VRM, POL, Notebook regulators,Graphics cards and battery power systems
- Operating frequency up to 1 MHz application.
- Operating Temperature Range -55°C to + 130°C , RoHs & HF compliance .
- T & R Qtys: 700 pcs , 13" Reel ;

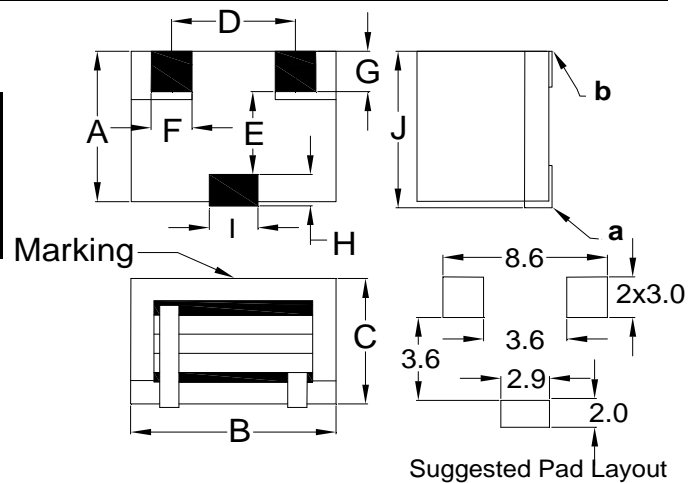


2. Electrical Characteristic of SQ4126 Series:

Part Number	Inductance (uH) ±20%	DCR (mΩ) Typical	DCR (mΩ) Max.	Isat ¹ (A) @25°C	Isat ² (A) @125°C	Irms (A) @25°C
SQ4126-R42MHF	0.42	1.200	1.390	45.00	36.00	26.00
SQ4126-R56MHF	0.56	1.200	1.390	36.00	28.00	26.00
SQ4126-R68MHF	0.68	1.200	1.390	29.00	23.00	26.00
SQ4126-1R0MHF	1.00	2.200	2.800	26.00	21.00	16.00
SQ4126-1R5MHF	1.50	3.900	4.399	22.00	17.00	13.00
SQ4126-2R2MHF	2.20	6.350	6.731	18.00	14.00	11.00
SQ4126-3R3MHF	3.30	7.500	7.950	14.50	11.00	10.00
SQ4126-4R7MHF	4.70	8.600	9.169	12.00	8.90	9.40
SQ4126-5R6MHF	5.60	8.600	9.169	9.40	7.50	9.40
SQ4126-6R8MHF	6.80	8.600	9.169	7.80	6.10	9.40
SQ4126-100MHF	10.00	8.600	9.169	5.30	4.20	9.40

3. Mechanical Dimension(Unit:mm):

A	B	C	D	E	F	G	H	I	J
Max.	Max.	Max.	Nom.	Nom.	Ref.	Nom.	Nom.	Nom.	Max.
8.10	10.30	6.65	6.00	4.20	1.80	2.30	1.30	2.40	8.20



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 ,Isat ;(Ta=25 °C).
- 3>.Isat¹,Isat²: DC current that will cause inductance to drops approximately by 20% ;
- 4>. 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. 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.

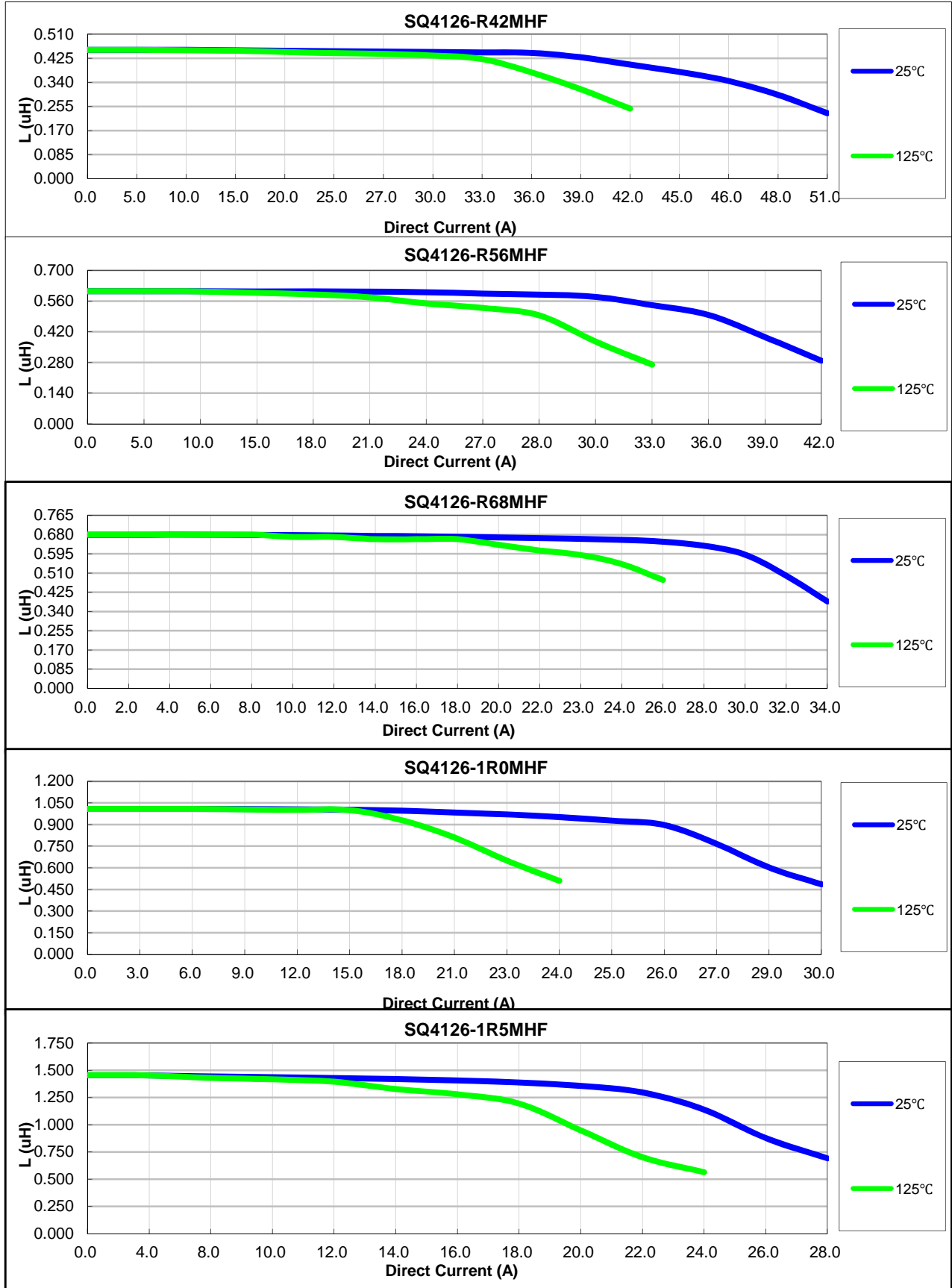
4. Inductance Characteristics (Inductance vs. Current):



SQ4126 Series



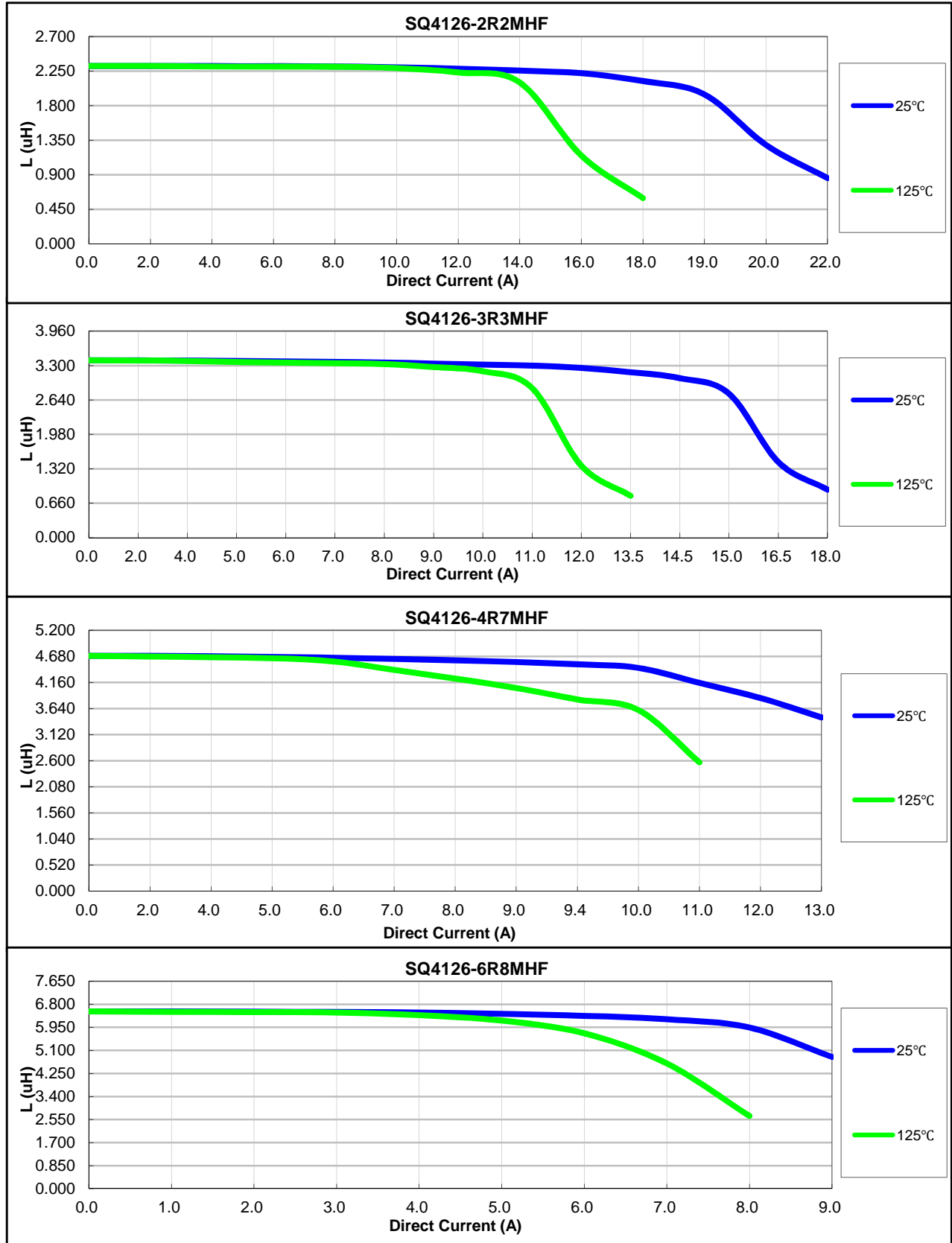
Inductance vs. Current





SQ4126 Series

Inductance vs. Current

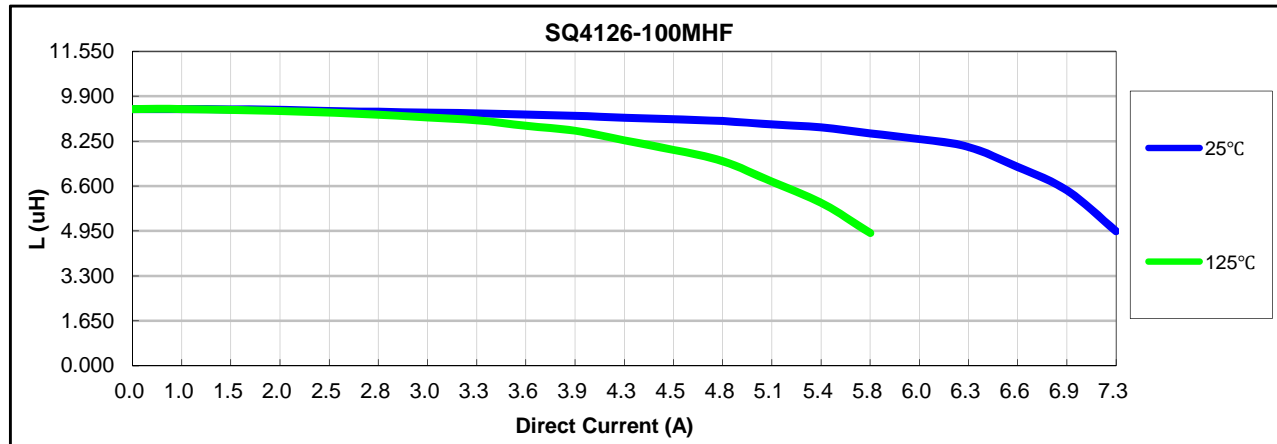




SQ4126 Series

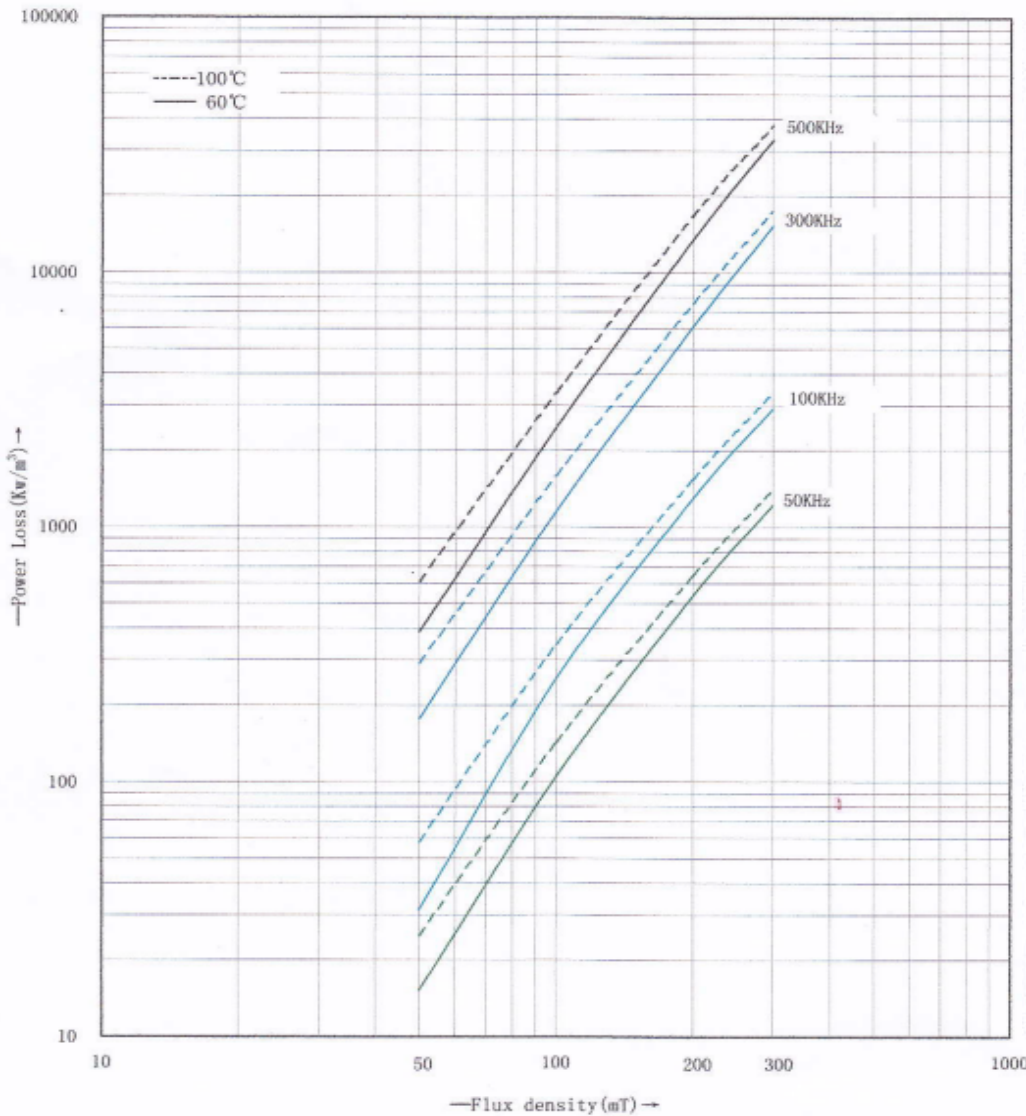


Inductance vs. Current



5. Core Loss:

Power Loss vs. Flux density



Condition	Temp.	mT	KW/m ³
50KHz	60°C	50	15
		100	105
		200	536
	100°C	50	25
		100	142
		200	643
100KHz	60°C	50	31
		100	253
		200	1292
	100°C	50	58
		100	344
		200	1532
300KHz	60°C	50	176
		100	1146
		200	6101
	100°C	50	291
		100	1582
		200	7535
500KHz	60°C	50	386
		100	2453
		200	13473
	100°C	50	610
		100	3361
		200	16725