

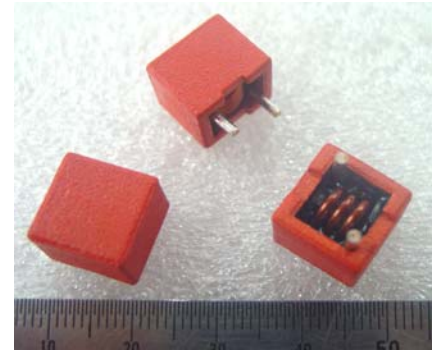


QS1210R Series

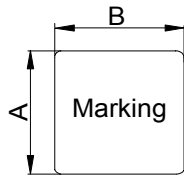


1. Features:

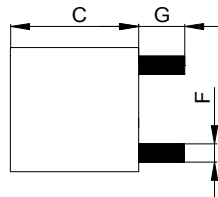
- Ferrite based Power Cube Inductor with lower core loss.
- Inductance Range:0.22uH to 4.7uH. custom values are welcomed.
- High current output chokes, up to 69.0 Amp.
- Ideal for desktop computers, server, workstations, VGA card, VRMs, and high density DC to DC converter application.
- Low DC resistance, compact size, high performance and low cost.
- Operating Temperature Range -55°C to + 130°C; RoHs&HF compliance.



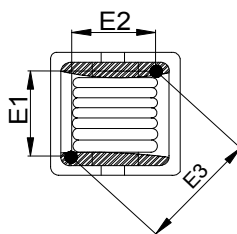
2. Mechanical Dimension(Unit:mm):



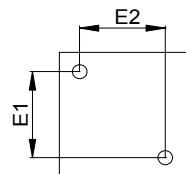
TOP VIEW



SIDE VIEW



BOTTOM VIEW



Suggest PCB Layout

Type	QS1210R	
A	12.0 (Max.)	
B	12.0 (Max.)	
C	10.5 (Max.)	
E1	(R22~1R0)	6.2±0.5
	(1R5~3R3)	6.5±0.5
	(3R9~4R7)	6.8±0.5
E2	(R22~1R0)	6.6±0.5
	(1R5~3R3)	7.0±0.5
	(3R9~4R7)	7.3±0.5
E3	(R22~1R0)	9.0±0.5
	(1R2~1R5)	9.5±0.5
	(3R9~4R7)	10.0±0.5
F	See below table	
G	3.5±0.5	

3. Electrical Characteristic of QS1210R Series:

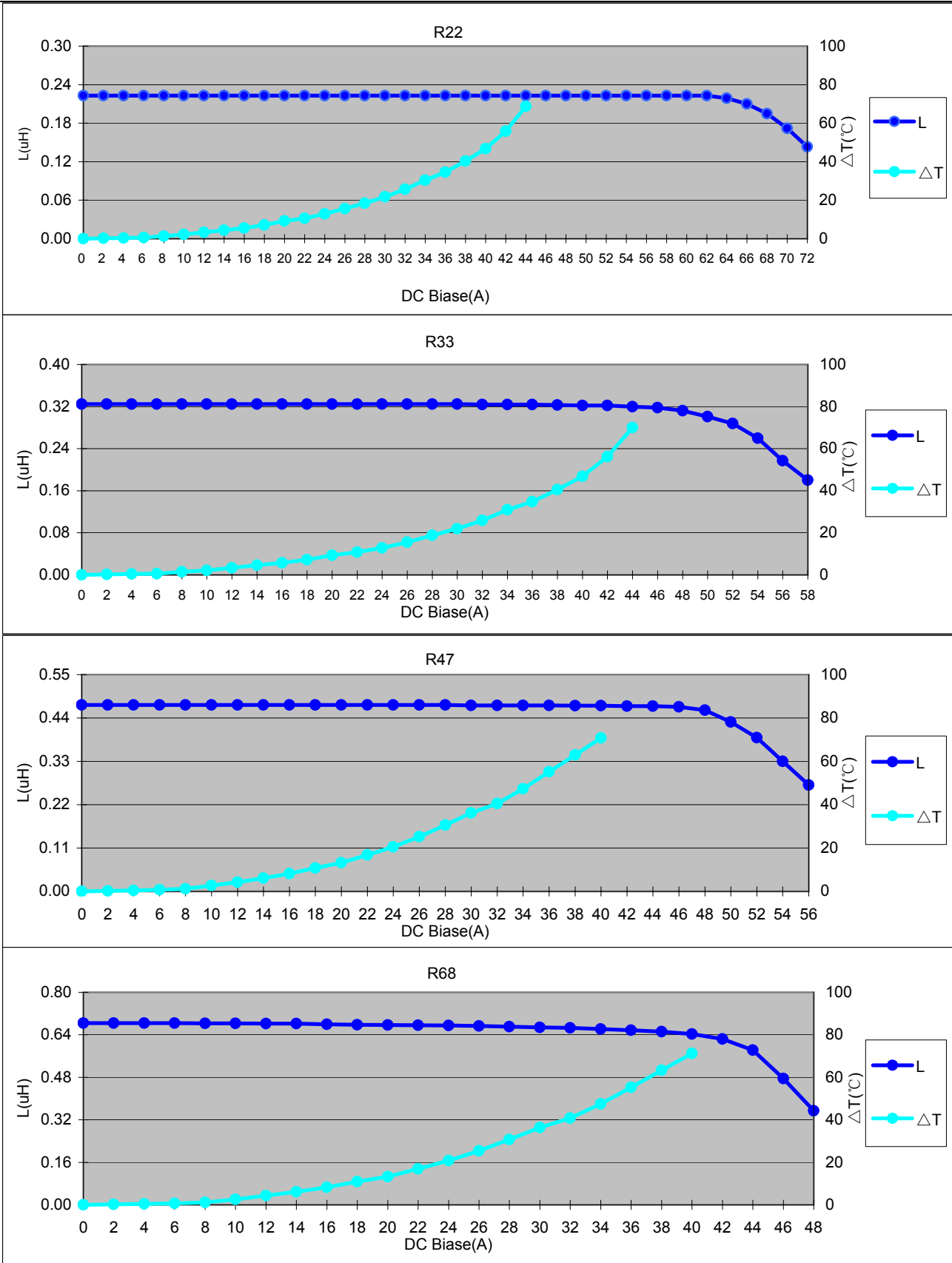
Part Number	OCL (uH) ±15%	DCR (mΩ) ±8%	Isat (A) @25°C	L@Isat (uH) Typ.	Irms (A) @25°C	L@Irms (uH) Typ.	Dimension F (mm)
QS1210R-R22MHF	0.22	0.48	69.0	0.184	38.0	0.223	1.70
QS1210R-R33MHF	0.33	0.48	53.0	0.270	38.0	0.323	1.70
QS1210R-R47MHF	0.47	0.87	51.0	0.395	32.0	0.472	1.50
QS1210R-R68MHF	0.68	0.87	44.0	0.580	32.0	0.666	1.50
QS1210R-R82MHF	0.82	0.87	33.0	0.683	32.0	0.702	1.50
QS1210R-1R0MHF	1.00	0.87	24.0	0.900	32.0	0.518	1.50
QS1210R-1R5MHF	1.50	1.60	23.0	1.260	22.0	1.297	1.30
QS1210R-2R2MHF	2.20	2.30	19.0	1.825	18.0	1.927	1.10
QS1210R-3R3MHF	3.30	4.20	17.5	2.762	15.0	3.104	0.90
QS1210R-3R9MHF	3.90	5.90	16.5	3.320	13.0	3.821	0.80
QS1210R-4R7MHF	4.70	8.80	15.5	4.000	10.0	4.631	0.70

Note:

- 1.OCL (Open Circuit Inductance) and L@ Irms and L @Isat and DCR are measured at: 100KHz,1.0V @ 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;(Ta=25°C)
- 4.Inductance and Temperature rise vs. DC Current curves are shown on the following pages.

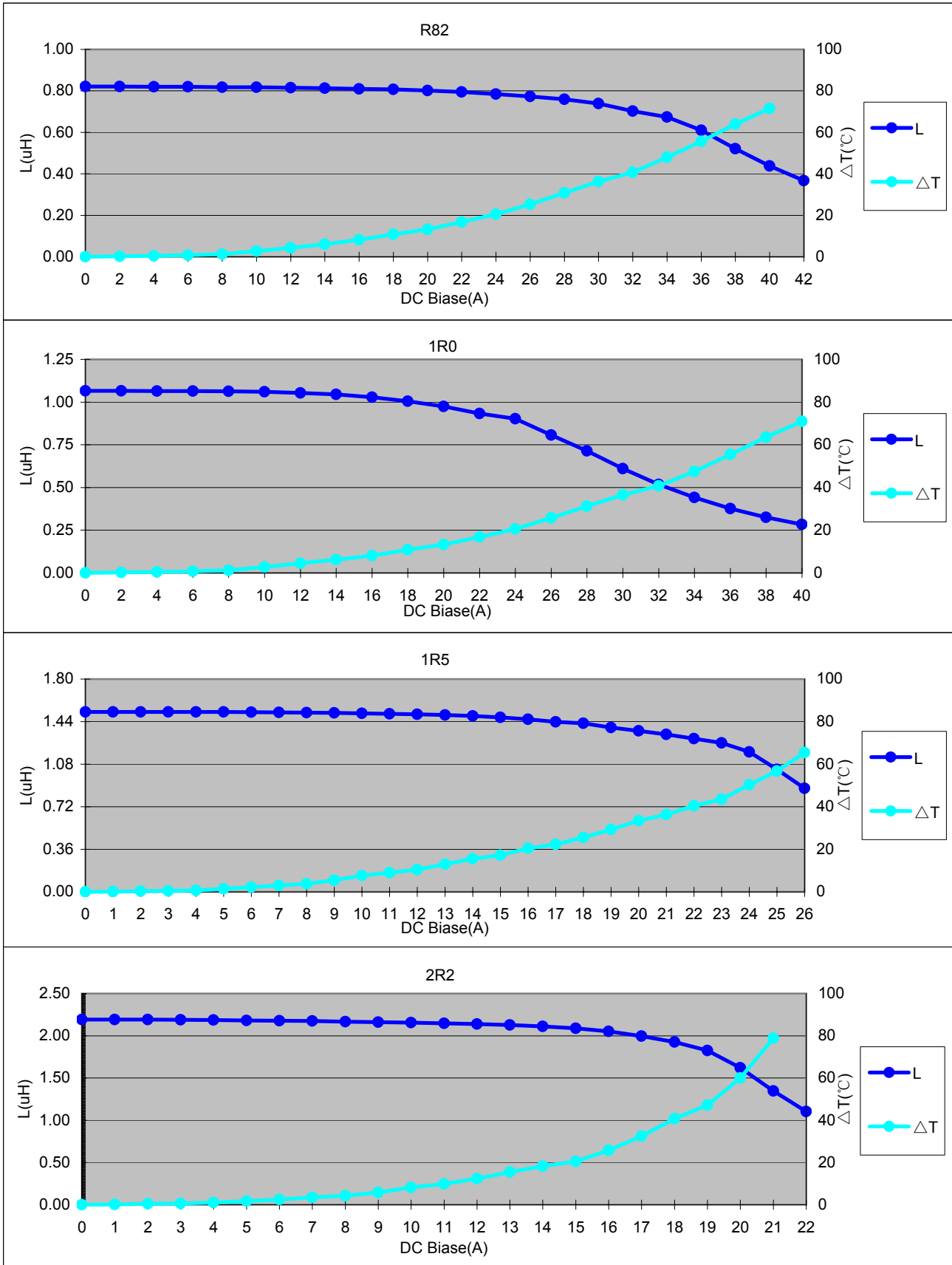


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