

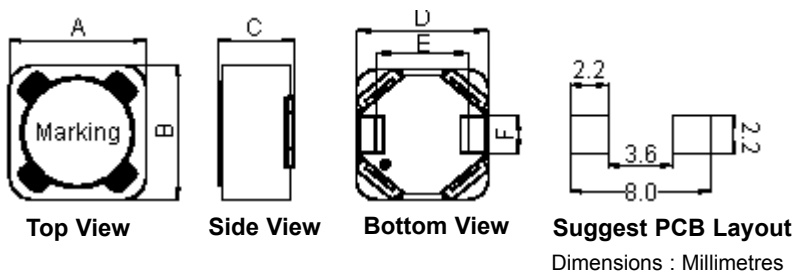


Features:

- Ferrite based SMD inductor with lower core loss.
- Inductance range: 1 μH to 1,000 μH . Custom values are welcome.
- High current output chokes, up to 8 amperes with about 30% roll off.
- Low profile 3.55 mm maximum height.
- Foot print 7.6 \times 7.6 mm maximum.
- Ideal for LCD driver, DSC/DVC, Notebook PC or High density board design.
- Operating temperature range -55°C to + 130°C.
- T and R Quantity: 1,350 pieces, 13 inches reel.



Mechanical Dimensions



Typ.	MCSDRH73B	
A	7.3 \pm 0.3 mm	-
B	7.3 \pm 0.3 mm	-
C	3.55 mm	(Max.)
D	7 \pm 0.3 mm	-
E	3.9 mm	(Ref.)
F	2 mm	

Electrical Characteristics of MCSDRH73B Series

OCL (μH) $\pm 20\%$	DCR (Ω) (Typ.)	DCR (Ω) (Max.)	I_{sat} (A) at 25°C	L at I_{sat} (μH) (Typ.)	I_{rms} (A) at 25°C	L at I_{rms} (μH) (Typ.)
1	0.0091	0.0109	8	0.785	6.5	0.89
1.5	0.0125	0.015	6.52	1.186	5.54	1.325
2.2	0.018	0.0216	5.52	1.7	4.6	1.95
3.3	0.023	0.0276	4.4	2.69	4.08	2.84
4.7	0.0297	0.0356	3.78	3.63	3.65	3.8
6.8	0.0415	0.0498	3.12	5.53	3.04	5.66
8.2	0.0525	0.063	2.8	6.5	2.7	6.7
10	0.0656	0.0787	2.5	8.16	2.35	8.48
15	0.08	0.096	2.05	10.3	2.12	9.65
22	0.108	0.13	1.67	15.25	1.83	13.9
33	0.166	0.199	1.35	24.75	1.48	19.75
47	0.231	0.277	1.14	33.2	1.25	27.9
68	0.331	0.397	0.96	48	1.04	41.33
82	0.41	0.492	0.89	55.05	0.94	49.3
100	0.491	0.589	0.79	71	0.86	60.33
150	0.751	0.901	0.65	100.8	0.69	88.9
220	1.05	1.26	0.53	156.3	0.59	126

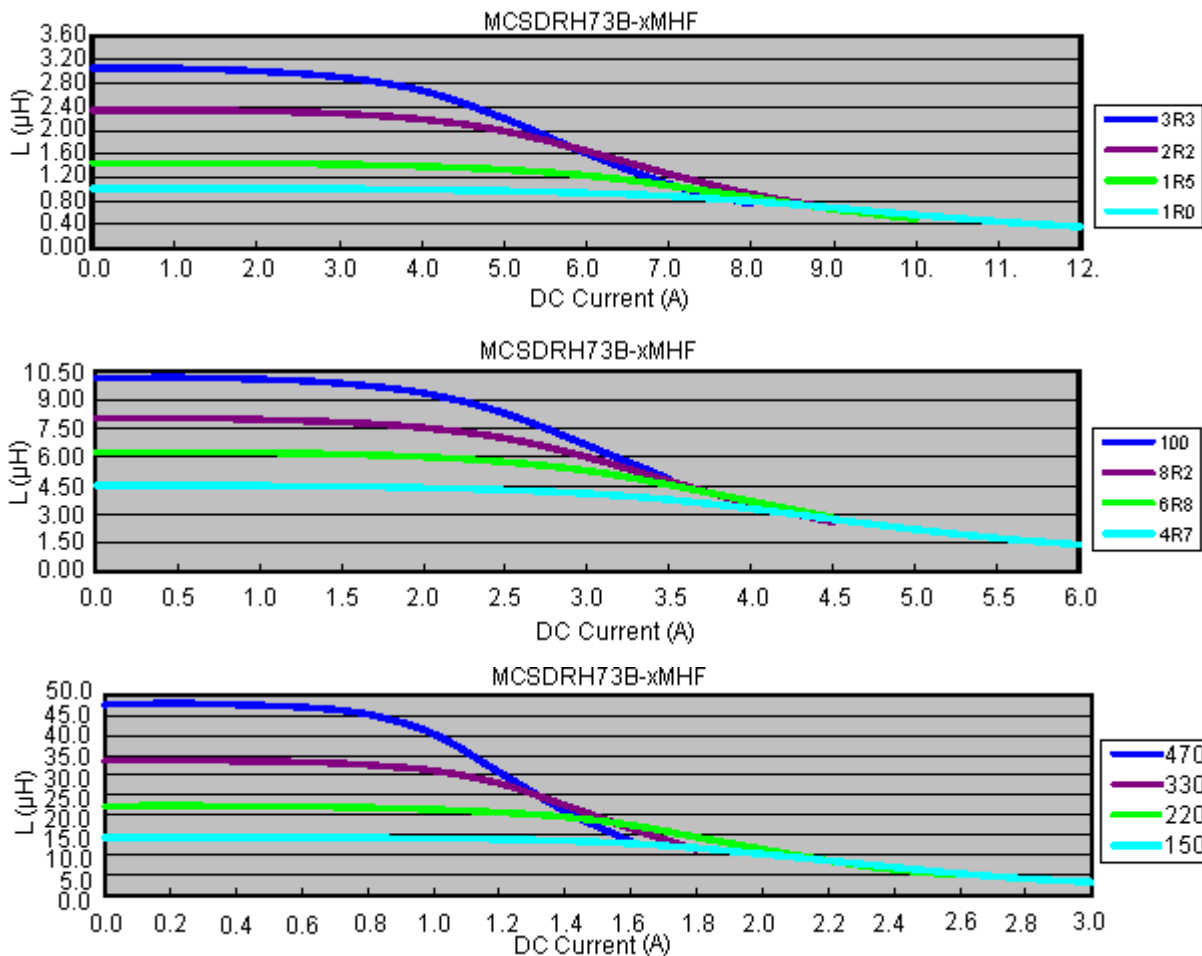
Electrical Characteristics of MCSDRH73B Series

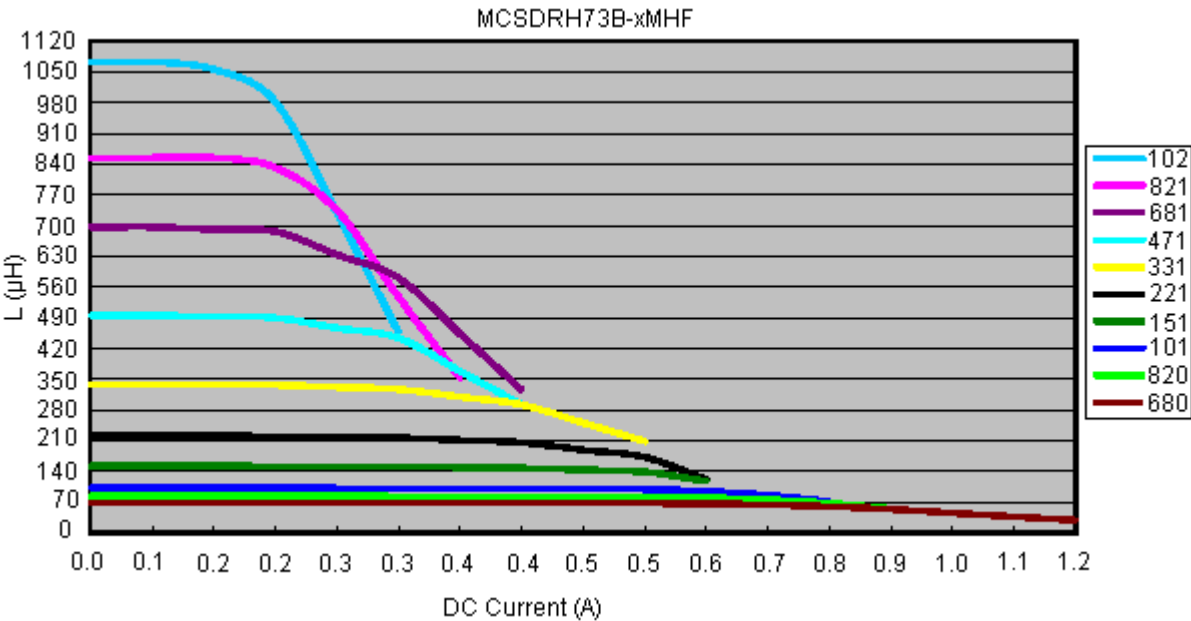
OCL (μ H) $\pm 20\%$	DCR (Ω) (Typ.)	DCR (Ω) (Max.)	I_{sat} (A) at 25°C	L at I_{sat} (μ H) (Typ.)	I_{rms} (A) at 25°C	L at I_{rms} (μ H) (Typ.)
330	1.59	1.908	0.44	252.7	0.48	219.9
470	2.17	2.604	0.37	320.2	0.41	263.7
680	3.12	3.744	0.31	542.1	0.34	467.3
820	4.01	4.812	0.28	591.3	0.3	515.5
1,000	5.06	6.072	0.25	679.9	0.27	578.4

Note :

1. OCL (Open Circuit Inductance) and L at I_{rms} and L at I_{sat} and DCR are measured at: 100 KHz, 0.25 V at 25°C.
2. I_{sat} : DC current that causes inductance to drop by approximately 30% from OCL ; ($T_a = 25^\circ\text{C}$).
3. I_{rms} : DC current that causes an approximate temperature rise (ΔT) of 40°C ; ($T_a = 25^\circ\text{C}$).

Inductance vs. Current





Part Number Table

Description	Part Number
Inductor, 1µH, 20%, 4.5A	MCSDRH73B-1R0MHF
Inductor, 1.5µH, 20%, 2pins	MCSDRH73B-1R5MHF
Inductor, 2.2µH, 3.9A, 20%	MCSDRH73B-2R2MHF
Inductor, 3.3µH, 20%, 2pins	MCSDRH73B-3R3MHF
Inductor, 4.7µH, 2.5A, 20%	MCSDRH73B-4R7MHF
Inductor, 6.8µH, 20%, 2pins	MCSDRH73B-6R8MHF
Inductor, 8.2µH, 20%, 2pins	MCSDRH73B-8R2MHF
Inductor, 10µH, 20%, 1.8A	MCSDRH73B-100MHF
Inductor, 15µH, 1.5A, 20%	MCSDRH73B-150MHF
Inductor, 22µH, 1.2A, 20%	MCSDRH73B-220MHF
Inductor, 33µH, 1.05A, 20%	MCSDRH73B-330MHF
Inductor, 47µH, 900mA, 20%	MCSDRH73B-470MHF
Inductor, 68µH, 20%, 700mA	MCSDRH73B-680MHF
Inductor, 82µH, 20%, 640mA	MCSDRH73B-820MHF
Inductor, 100µH, 20%, 580mA	MCSDRH73B-101MHF
Inductor, 150µH, 450mA, 20%	MCSDRH73B-151MHF
Inductor, 220µH, 360mA, 20%	MCSDRH73B-221MHF
Inductor, 330µH, 300mA, 20%	MCSDRH73B-331MHF
Inductor, 470µH, 20%, 250mA	MCSDRH73B-471MHF
Inductor, 680µH, 20%, 210mA	MCSDRH73B-681MHF
Inductor, 820µH, 20%, 200mA	MCSDRH73B-821MHF
Inductor, 1mH, 20%, 2pins	MCSDRH73B-102MHF

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