

MDA Series

SMD Low Profile High Current Molded Inductor

Size 7050



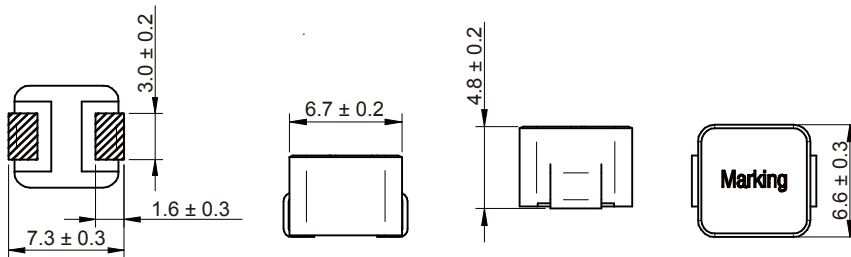
FEATURES

- Frequency range up to 5.0 MHz
- High current capability and handles high transient current spikes
- High performance (I_{SAT}) realized by metal dust core.
- Very low acoustic noise and very low leakage flux noise.
- AEC-Q200 qualified
- Operating temperature: -55°to +155°(including self-temperature rise)
- Quantity: 800pcs

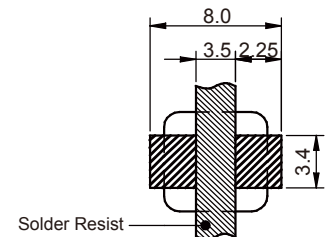
APPLICATION

- DC/DC converters for entertainment/navigation systems
- Noise suppression for motors: windshield wipers / power seats / power mirrors / heating and ventilation blowers /HID lighting
- LED drivers

Dimensions: [mm]



Land Pattern: [mm]



Electrical Properties:

Part No	L@100KHz /1.0V (μ H)	Tolerance	I_R Typ. (A)	I_R Max. (A)	I_{SAT} Typ. (A)	I_{SAT} Max. (A)	R_{DC} Typ. (m Ω)	R_{DC} Max. (m Ω)
MDA7050-R47M	0.47	20%	22	20	22	20	2.9	3.3
MDA7050-R68M	0.68	20%	20	18	20	17	3.6	4.1
MDA7050-1R0M	1.00	20%	17	15	16	13	5.6	6.2
MDA7050-1R5M	1.50	20%	15	13	13	10.5	6.6	7.3
MDA7050-2R2M	2.20	20%	14	12	10	8.5	10	11.5
MDA7050-3R3M	3.30	20%	13	11	9.5	8.0	14	16.2
MDA7050-4R7M	4.70	20%	11	9.5	8.8	7.5	20.8	24
MDA7050-6R8M	6.80	20%	9.0	8.0	7.6	7.0	30	36
MDA7050-8R2M	8.20	20%	7.5	6.5	6.5	6.0	38.5	45
MDA7050-100M	10.0	20%	7.0	6.0	6.0	5.7	44	53
MDA7050-150M	15.0	20%	5.0	4.0	4.0	3.2	73	85

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MDA7050-220M	22.0	20%	4.2	3.6	3.6	3.1	122	142
MDA7050-330M	33.0	20%	3.0	2.5	2.3	1.8	142	170
MDA7050-470M	47.0	20%	2.6	2.0	1.8	1.5	275	320

All test data referenced to 25 °C ambient.

I_R will cause the coil temperature rise approximately $\Delta t 40^{\circ}\text{C}$

I_{SAT} will cause L to drop approximately 30% .

Typical Electrical Characteristics:

