

MDA Series

SMD Low Profile High Current Molded Inductor

Size 7030



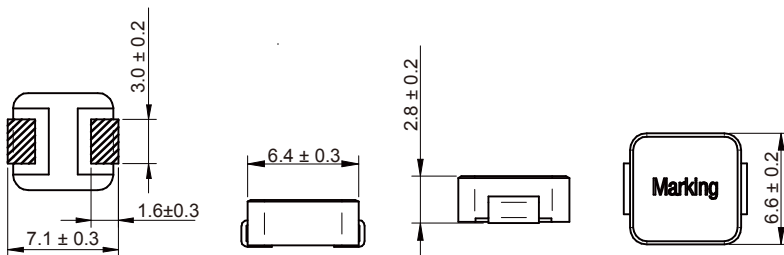
FEATURES

- 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 +150°(including self-temperature rise)
- Quantity: 1000pcs

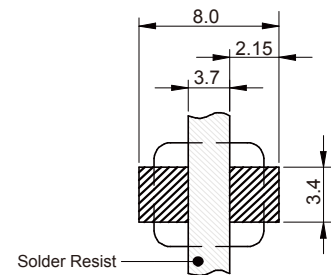
APPLICATION

- 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)
MDA7030-R15N	0.15	30%	30	25	40	36	1.7	2.1
MDA7030-R22M	0.22	20%	23	21	34	32	2.0	2.5
MDA7030-R33M	0.33	20%	21	20	25	22	2.8	3.4
MDA7030-R36M	0.36	20%	20	18	24	21	3.3	3.9
MDA7030-R47M	0.47	20%	18	16	20	18	3.4	4.0
MDA7030-R56M	0.56	20%	16.5	15	18	16	3.9	4.5
MDA7030-R68M	0.68	20%	16	14.5	17	15	4.7	5.3
MDA7030-R82M	0.82	20%	14	13	16	14	5.4	6.0
MDA7030-1R0M	1.00	20%	12	11	15	13.5	6.7	7.4
MDA7030-1R2M	1.20	20%	10	9.5	14	12.5	7.7	9.5
MDA7030-1R5M	1.50	20%	10	9.0	14	12	10.2	12.1
MDA7030-1R8M	1.80	20%	9.0	8.0	12	10	10.9	13
MDA7030-2R2M	2.20	20%	8.0	7.5	10	9.0	13.5	15
MDA7030-2R7M	2.70	20%	7.2	7.0	9.8	8.8	17.3	20
MDA7030-3R3M	3.30	20%	6.5	6.0	9.5	8.5	19	22

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MDA7030-4R7M	4.70	20%	5.5	5.0	6.5	5.5	28	33
MDA7030-5R6M	5.60	20%	5.5	5.0	6.0	5.2	39	42
MDA7030-6R8M	6.80	20%	4.5	4.2	6.0	5.0	43	50
MDA7030-8R2M	8.20	20%	4.5	4.0	6.0	4.7	54	60
MDA7030-100M	10.0	20%	4.0	3.5	5.5	4.5	62	68
MDA7030-150M	15.0	20%	3.0	2.5	4.5	4.0	110	140
MDA7030-220M	22.0	20%	2.5	2.0	3.0	2.5	150	190
MDA7030-330M	33.0	20%	2.1	1.8	2.5	2.0	215	258

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:

