

MDA Series

SMD Low Profile High Current Molded Inductor

Size 1050



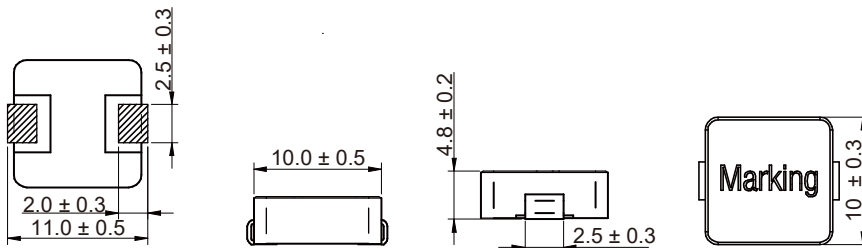
FEATURES

- 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: 500pcs

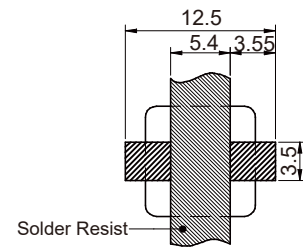
APPLICATION

- 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

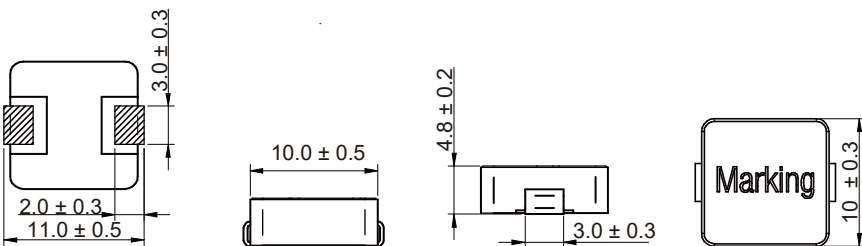
Dimensions: [mm] 0.68 μ H-1.50 μ H



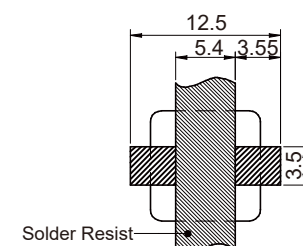
Land Pattern: [mm]



Dimensions: [mm] $\leq 0.47\mu$ H / $\geq 2.20\mu$ H



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)
MDA1050-R36M	0.36	±20%	34	30	52	46	0.82	0.92
MDA1050-R47M	0.47	±20%	33	29	46	40	1.15	1.32
MDA1050-R68M	0.68	±20%	28	25	35	32	1.6	1.9
MDA1050-1R0M	1.00	±20%	25	23	33	30	2.6	3.0

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MDA1050-1R5M	1.50	±20%	23	21	27	24	3.4	3.8
MDA1050-2R2M	2.20	±20%	19.5	17.5	20	18	5.1	5.6
MDA1050-3R3M	3.30	±20%	17	15	17.5	15.5	8.1	9.1
MDA1050-4R7M	4.70	±20%	15	13	16	14	9.3	10.5
MDA1050-5R6M	5.60	±20%	13	11	15	12.5	12.8	14.4
MDA1050-6R8M	6.80	±20%	12	10	14	12	15	17.3
MDA1050-100M	10.0	±20%	7.6	7.2	13	11	18.9	21.8
MDA1050-220M	22.0	±20%	6.0	5.5	6.0	5.5	44	54
MDA1050-470M	47.0	±20%	4.5	4.0	3.5	4.0	106	127

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:

