

MDA Series

SMD Low Profile High Current Molded Inductor Size 1365



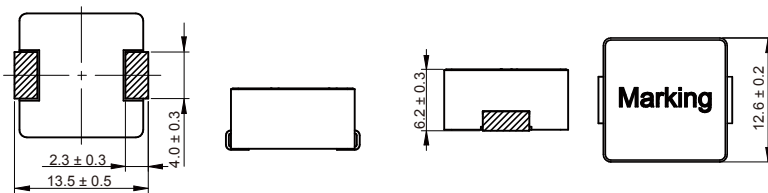
FEATURES

- 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

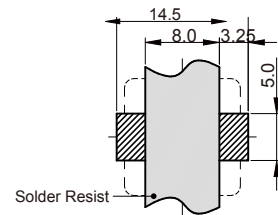
APPLICATION

- 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

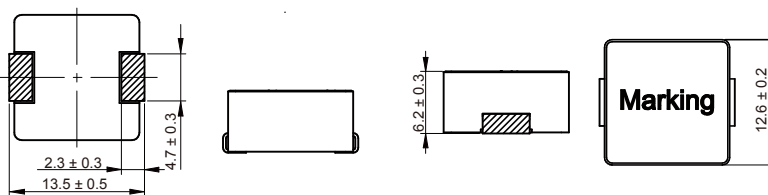
Dimensions: [mm] 0.68 μ H-1.50 μ H



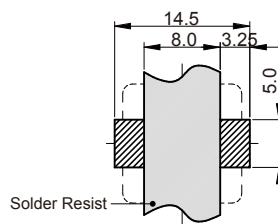
Land Pattern: [mm]



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)
MDA1365-R68M	0.68	$\pm 20\%$	36.5	33	55	46	1.25	1.5
MDA1365-1R0M	1.00	$\pm 20\%$	33	29	45	36	1.5	1.8
MDA1365-1R5M	1.50	$\pm 20\%$	29	25	35	30	2.2	2.53

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)
MDA1365-R10N	0.10	± 30%	65.0	60.0	120	115	0.2	0.25
MDA1365-R22M	0.22	± 20%	53.0	42.0	112	105	0.4	0.46
MDA1365-R33M	0.33	± 20%	46.0	36.0	75.0	65.0	0.6	0.70
MDA1365-2R2M	2.20	± 20%	25.0	21.0	28.5	24.0	3.7	4.20
MDA1365-3R3M	3.30	± 20%	22.0	19.0	27.0	22.5	5.3	6.20
MDA1365-4R7M	4.70	± 20%	20.0	17.0	25.0	21.0	6.8	8.00
MDA1365-5R6M	5.60	± 20%	18.0	15.0	23.0	19.5	8.3	9.80
MDA1365-6R8M	6.80	± 20%	16.5	14.0	21.0	18.0	9.8	11.3
MDA1365-8R2M	8.20	± 20%	15.0	12.5	19.0	17.0	12	13.8
MDA1365-100M	10.0	± 20%	13.0	11.0	17.0	15.0	13	15.8
MDA1365-150M	15.0	± 20%	11.0	9.50	13.5	12.0	22	26.0
MDA1365-220M	22.0	± 20%	10.0	8.00	10.0	9.00	31	35.0
MDA1365-270M	27.0	± 20%	9.50	7.20	9.00	8.00	36	45.0
MDA1365-330M	33.0	± 20%	9.00	6.50	9.00	8.00	46	55.0
MDA1365-470M	47.0	± 20%	8.00	5.70	7.60	6.80	58	67.0
MDA1365-680M	68.0	± 20%	5.80	4.80	6.00	5.00	82	100

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:

