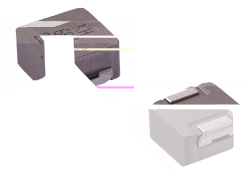
MDA HT Series

SMD Low Profile High Current Molded Inductor

Size 1054



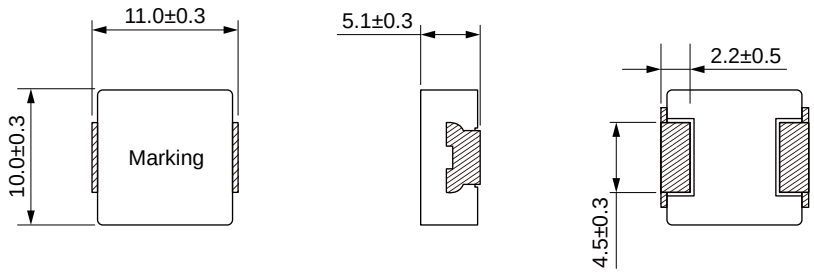
FEATURES

- Low loss realized with low DCR.
- Ultra low buzz noise, due to composite construc on .
- 100% Lead(Pb)-Free and RoHS compliant.
- High performance (Isat) realized by metal dust core.
- AEC-Q200 qualified.
- Opera ng temperature: -55 to +155 °C (including self-temperature rise)
- Quan ty: 500PCS

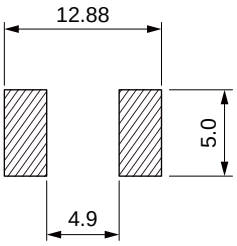
APPLICATION

- Headlamps, tail lamps and interior ligh ng
- HVAC
- Doors, window li and seat control
- Audio subsystem
- Digital instrument cluster
- In-Vehicle Infotainment and naviga on

Dimensions: [mm]



Land Pattern: [mm]



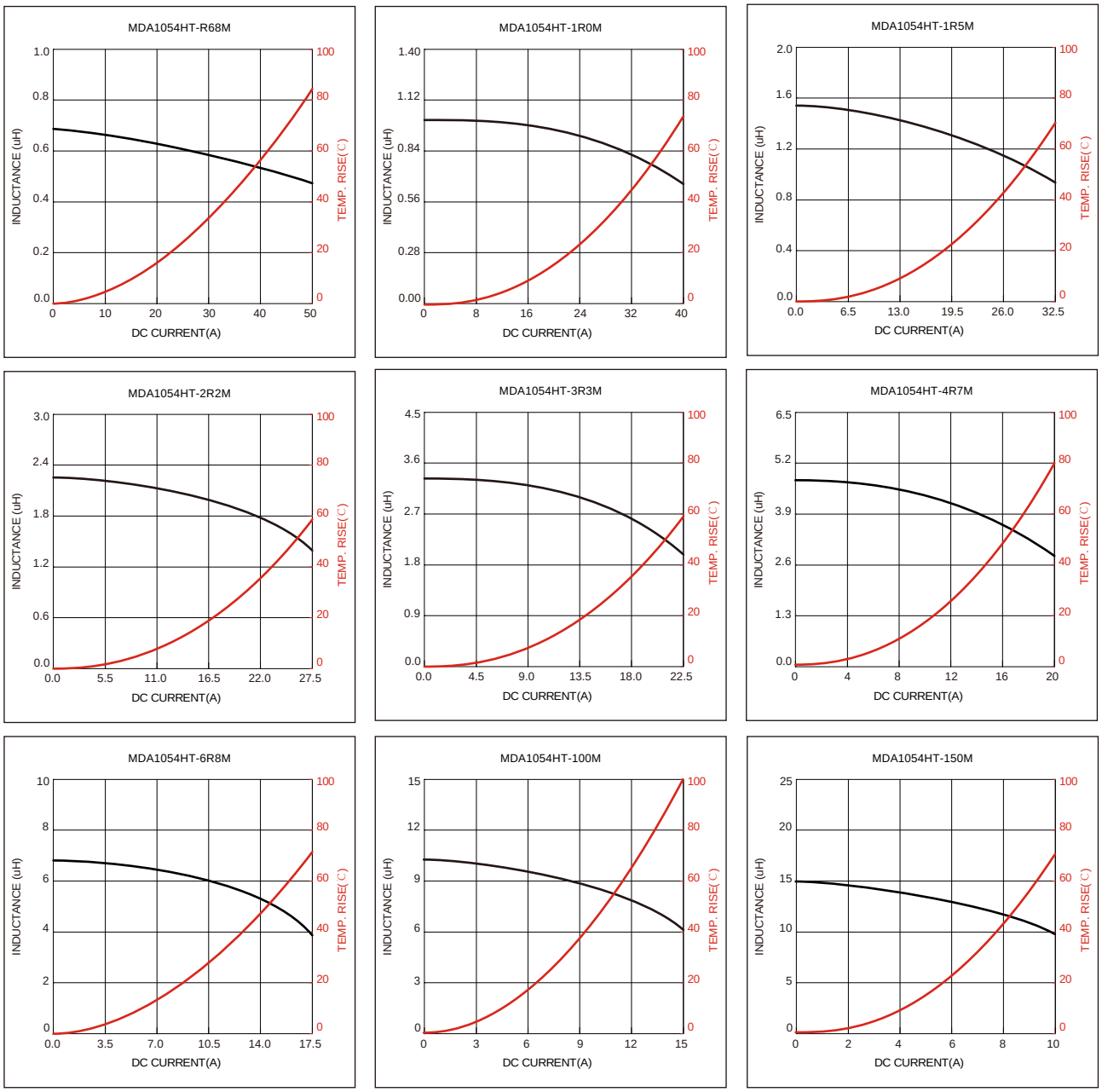
Electrical Properties:

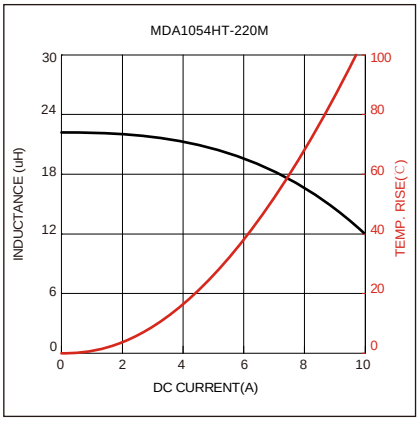
MDA1054HT-R68M	0.68	±20%	32.0	28.8	46.0	39.4	1.80	2.22
MDA1054HT-1R0M	1.00	±20%	30.0	27.0	37.0	31.7	2.30	2.76
MDA1054HT-1R5M	1.50	±20%	25.0	22.3	27.0	23.0	3.60	4.20
MDA1054HT-2R2M	2.20	±20%	23.0	20.7	25.0	21.4	4.10	4.90
MDA1054HT-3R3M	3.30	±20%	18.7	16.8	19.0	16.3	6.20	7.40
MDA1054HT-4R7M	4.70	±20%	14.5	13.0	15.7	13.5	9.00	10.0
MDA1054HT-6R8M	6.80	±20%	12.3	10.8	13.3	11.4	12.4	14.0
MDA1054HT-100M	10.0	±20%	9.00	7.80	12.8	10.9	22.0	24.2
MDA1054HT-150M	15.0	±20%	7.60	6.80	9.20	7.90	27.3	31.3

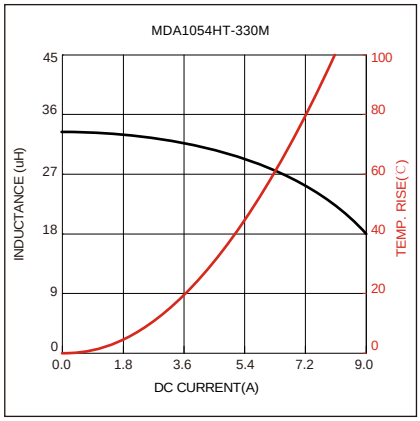
MDA1054HT-220M	22.0	±20%	6.00	5.40	8.80	7.50	43.5	50.0
MDA1054HT-330M	33.0	±20%	4.80	4.30	7.60	6.50	66.0	75.3
MDA1054HT-470M	47.0	±20%	4.20	3.60	4.90	4.20	89.0	103
MDA1054HT-680M	68.0	±20%	3.30	3.00	4.20	3.60	133	152
MDA1054HT-101M	100	±20%	2.80	2.50	3.50	3.00	215	234

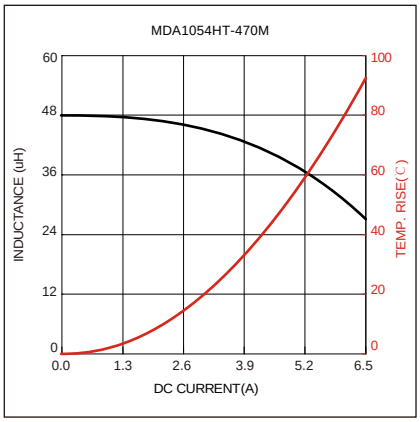
Satura on Current will cause L to drop approximately 30%.
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

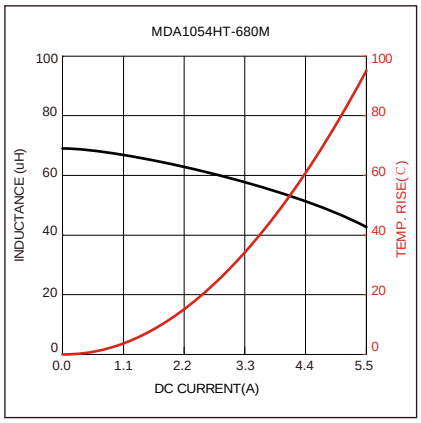
Typical Electrical Characteristics:

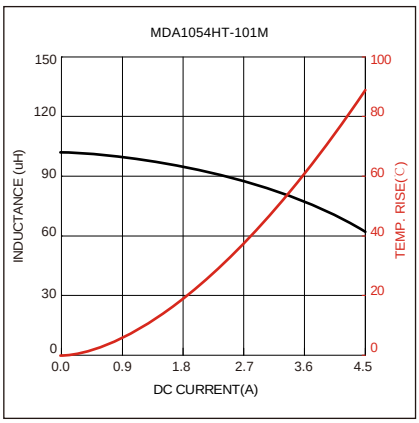



MDA1054HT-220M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0 2 4 6 8 10
0 6 12 18 24 30
0 20 40 60 80 100

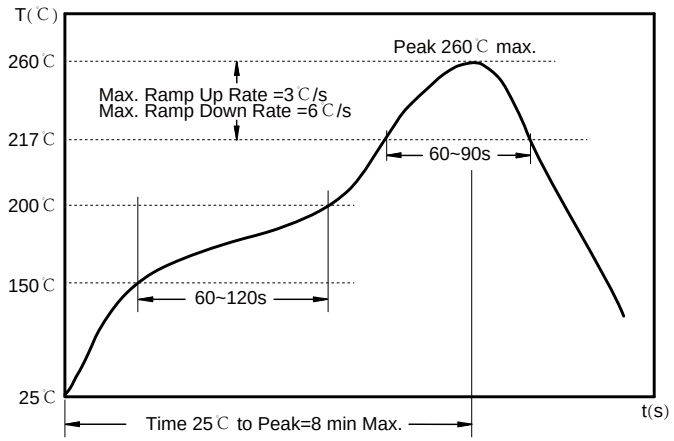

MDA1054HT-330M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0.0 1.8 3.6 5.4 7.2 9.0
0 9 18 27 36 45
0 20 40 60 80 100


MDA1054HT-470M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0.0 1.3 2.6 3.9 5.2 6.5
0 12 24 36 48 60
0 20 40 60 80 100


MDA1054HT-680M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0.0 1.1 2.2 3.3 4.4 5.5
0 20 40 60 80 100
0 20 40 60 80 100


MDA1054HT-101M
INDUCTANCE (uH)
TEMP. RISE(℃)
DC CURRENT(A)
0.0 0.9 1.8 2.7 3.6 4.5
0 30 60 90 120 150
0 20 40 60 80 100

Soldering Reflow:



Preheat condition: 150 ~200℃/ 60~120 sec.

Allowed time above 217℃: 60~90 sec.

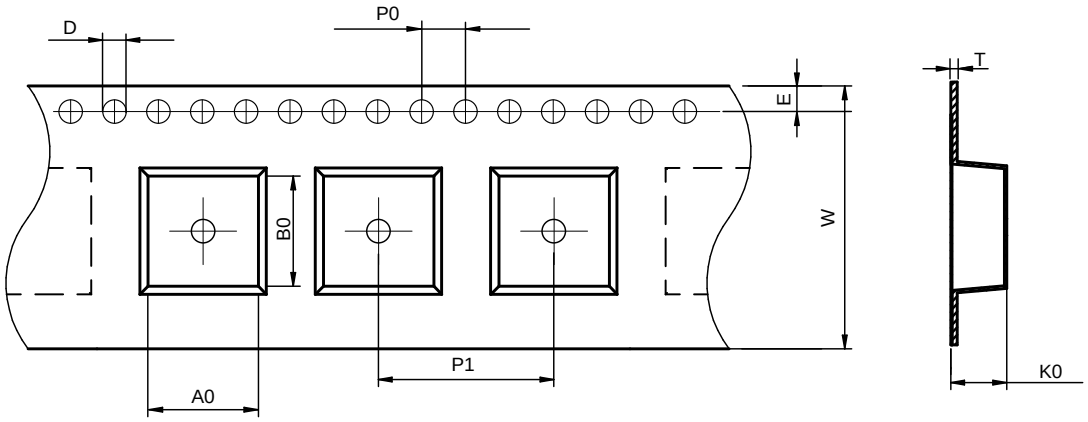
Max temperature: 260℃.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

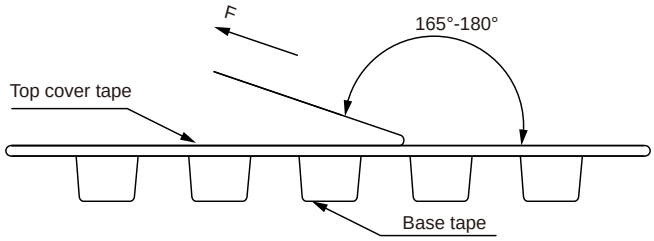
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDA1054HT	10.4±0.1	11.6±0.1	1.5±0.1	4.0±0.1	16±0.1	24±0.3	5.7±0.1	1.75±0.1	0.40±0.05

Peel force of top cover tape:

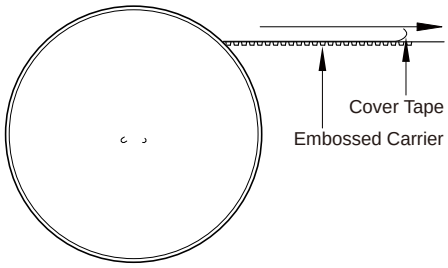


The peel force of top cover tape shall be between 0.1 to 1.3 N

Product Marking:

Marking	KH+Printing (Inductance+period)

Reel Dimension：[mm]



Packaging Quantity: