

# **MDA HT Series**

# SMD Low Profile High Current Molded Inductor Size 1365



#### **FEATURES**

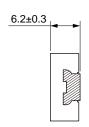
- Low loss realized with low DCR.
- Ultra low buzz noise, due to composite construction .
- 100% Lead (Pb)-Free and RoHS compliant.
- High performance (Isat) realized by metal dust core.
- AEC-Q200 qualified.
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 500PCS

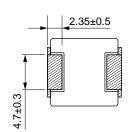
#### **APPLICATION**

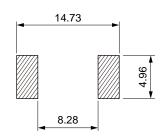
- Headlamps, tail lamps and interior lighting
- HVAC
- Doors, window lift and seat control
- Audio subsystem
- Digital instrument duster
- In-Vehicle Infotainment and navigation

# Dimensions: [mm]









Land Pattern: [mm]

# **Electrical Properties:**

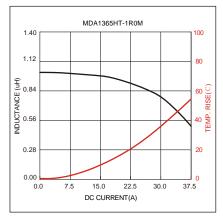
Part No	Inductance @ 100KHz/1V	Tolerance	Temperature Rise urrent Typ.	urrent Typ.	D Resistance Max.
				71	
MDA1365HT-1R0M	1.0	±20%	32.0	32.0	2.1
MDA1365HT-1R5M	1.5	±20%	26.0	29.0	3.0
MDA1365HT-2R2M	2.2	±20%	21.0	26.0	4.5
MDA1365HT-3R3M	3.3	±20%	18.3	24.0	6.0
MDA1365HT-4R7M	4.7	±20%	15.0	20.0	8.7
MDA1365HT-6R8M	6.8	±20%	13.8	17.0	11.3
MDA1365HT-100M	10	±20%	11.0	13.5	17.2
MDA1365HT-150M	15	±20%	8.7	10.0	28.2
MDA1365HT-220M	22	±20%	7.0	8.0	40.0
MDA1365HT-330M	33	±20%	5.5	7.2	69.0
MDA1365HT-470M	47	+20%	4.2	6.0	104

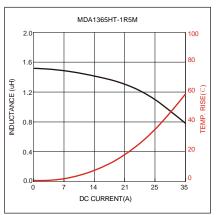
Saturation Current will cause L to drop approximately 30%.

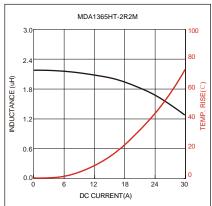
Temperature Rise Current: The actual value of DC current when the temperature rise is  $\triangle T$ =40°C

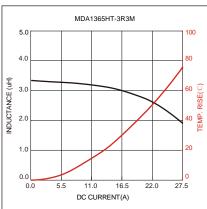


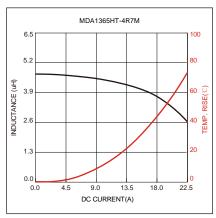
# Typical Electrical Characteristics:

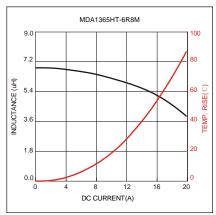


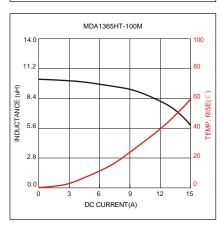


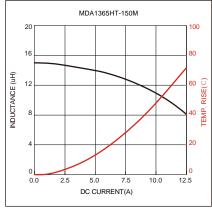


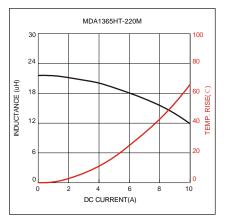


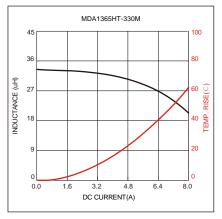


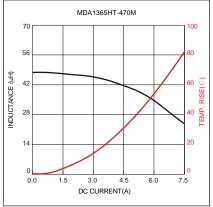






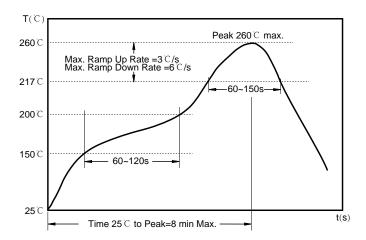








# Soldering Reflow:



Preheat condition: 150 ~200  $^{\circ}$ C / 60~120 sec.

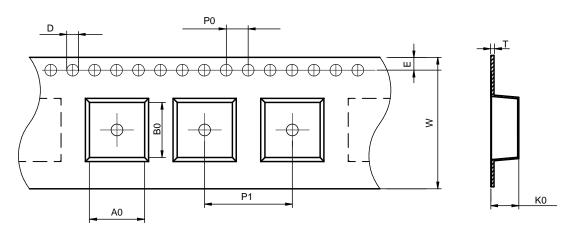
Allowed time above 217°C: 60~150 sec.

Max temperature: 260 ℃.

Allowed Reflow time: 2x max.

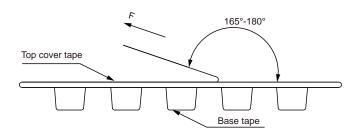
# Packaging Information:

# Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDA1365HT	13.1±0.1	14.0±0.1	1.5±0.1	4.0±0.1	16±0.1	24±0.3	6.7±0.1	1.75±0.1	0.50±0.05

## Peel force of top cover tape:



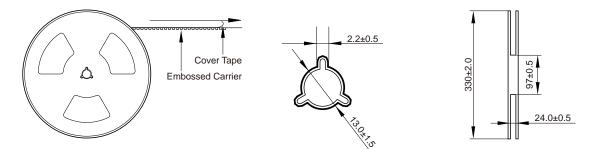
The peel force of top cover tape shall be between 0.1 to 1.3 N

# **Product Marking:**

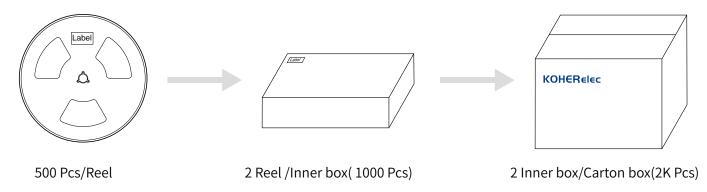
Marking	KH+Printing (Inductance+period)	
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#### Reel Dimension: [mm]



#### Packaging Quantity:



# Storage Conditions:

Cautions and Warnings:

- The storage period is within 12 months after the completion of production. Be sure to follow the storage conditions (temperature: -5 to 35°C, humidity: 75% RH Max). If the storage period elapses, the soldering of the terminal electrodes may deteriorate. The warranty period is one year.
- Product should not be exposed to environment with high temperature, high humidity, dust, corrosive gas and etc.
- Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
- Please always handle products carefully to prevent any damage caused by dropping down or inappropriate removing.

#### **Operation Instructions:**

- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications. If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- Generally, Koher might not be familiar with either customer's specific application or actual requests as customer
  does.As a result customer shall be responsible for checking and confirming whether Koher product with the
  performance described in the product specification is suitable for using in customer's particular application or
  not.