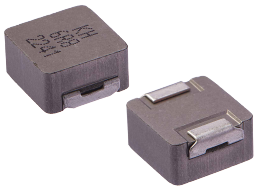
MDA HT Series

SMD Low Profile High Current Molded Inductor

Size 1365



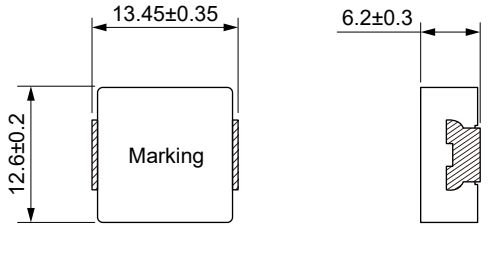
FEATURES

- High performance realized by metal dust core and hot pressing process.
- Ultra low buzz noise, due to composite construction.
- The wide pad design provides excellent anti-vibration capability.
- AEC-Q200 qualified.
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 500PCS

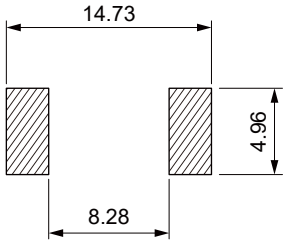
APPLICATION

- Thermal management products, such as water pumps and valves
- Headlamps, tail lamps and interior lighting
- HVAC

Dimensions: [mm]



Land Pattern: [mm]



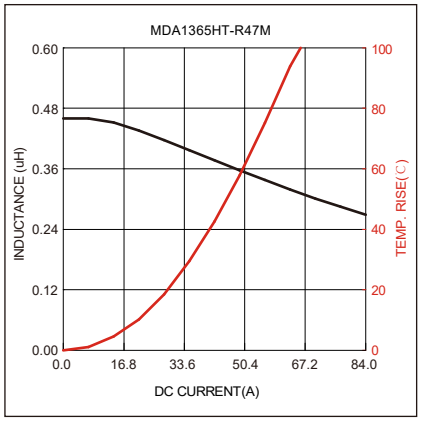
Electrical Properties:

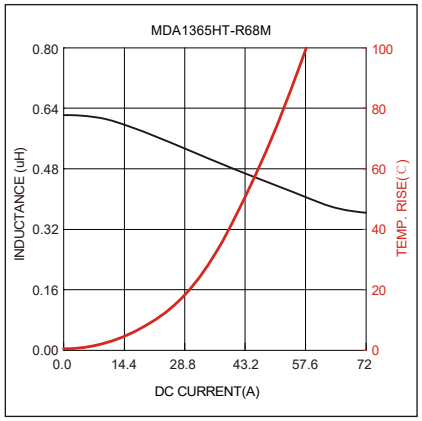
Part No	Inductance @ 100KHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Max. (mΩ)
MDA1365HT-R47M	0.47	±20%	41.0	36.9	60.0	50.0	1.30
MDA1365HT-R68M	0.68	±20%	38.0	30.0	36.5	32.0	1.70
MDA1365HT-1R0M	1.00	±20%	32.0	27.5	32.0	26.0	2.10
MDA1365HT-1R5M	1.50	±20%	26.0	23.0	29.0	23.0	3.00
MDA1365HT-2R2M	2.20	±20%	21.0	18.9	26.0	22.0	4.50
MDA1365HT-3R3M	3.30	±20%	18.3	16.5	24.0	20.0	6.00
MDA1365HT-4R7M	4.70	±20%	15.0	13.5	20.0	18.0	8.70
MDA1365HT-6R8M	6.80	±20%	13.8	12.8	17.0	15.0	11.3
MDA1365HT-100M	10.0	±20%	11.0	9.90	13.5	11.5	17.2
MDA1365HT-150M	15.0	±20%	8.70	7.80	10.0	8.00	28.2
MDA1365HT-220M	22.0	±20%	7.00	6.20	8.00	7.00	40.0
MDA1365HT-330M	33.0	±20%	5.50	5.00	7.20	5.50	69.0
MDA1365HT-470M	47.0	±20%	4.20	3.80	6.00	5.00	104

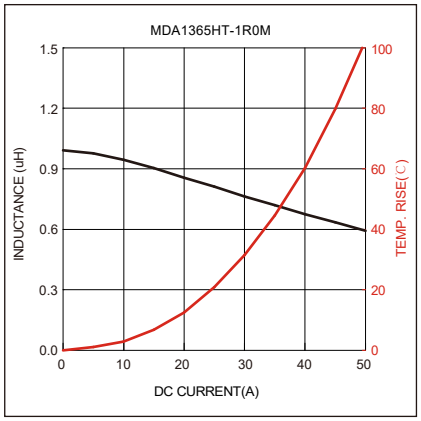
Saturation Current will cause L to drop approximately 30%.

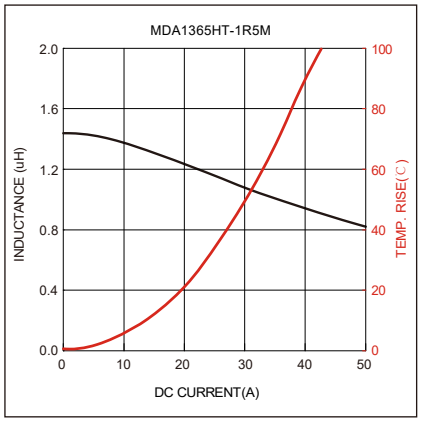
Temperature Rise Current: The actual value of DC current when the temperature rise is △T=40°C

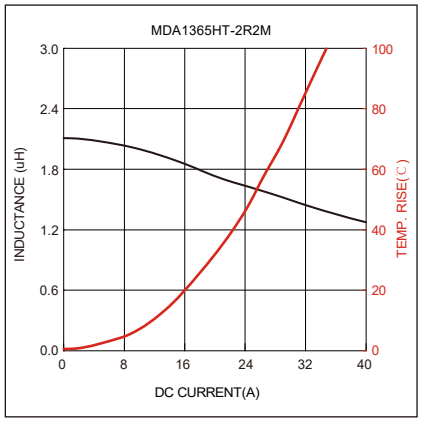
Typical Electrical Characteristics:

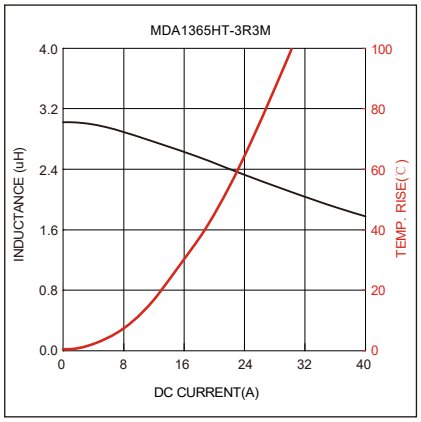


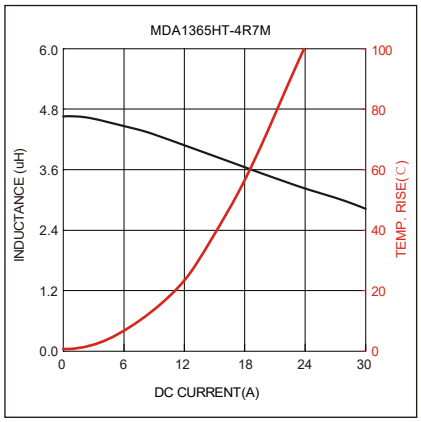


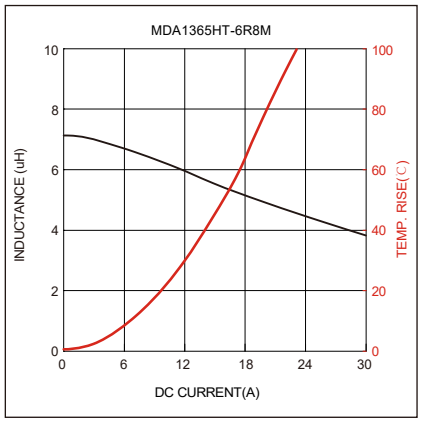


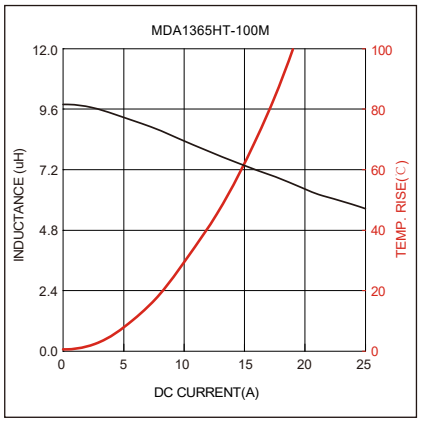


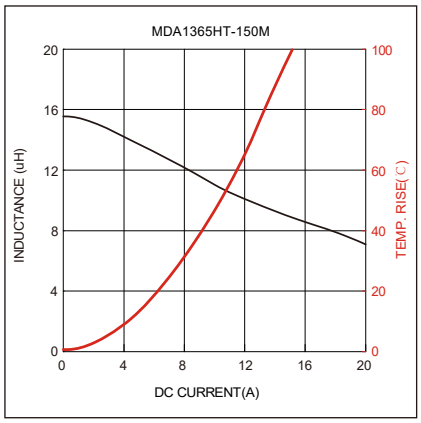


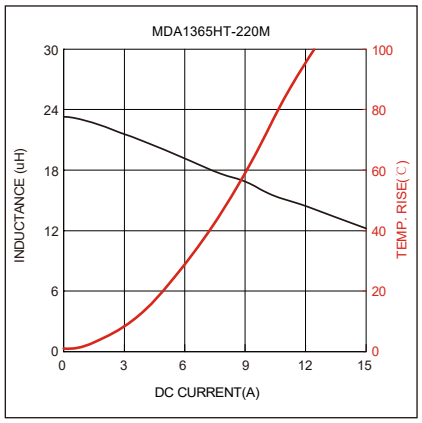


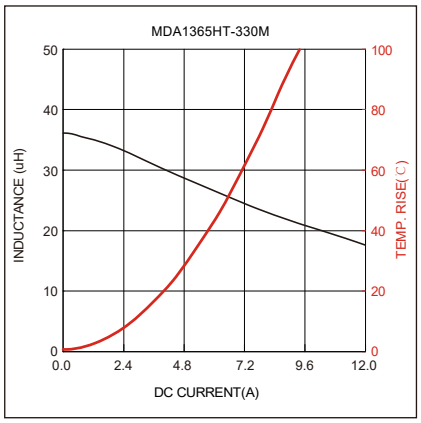




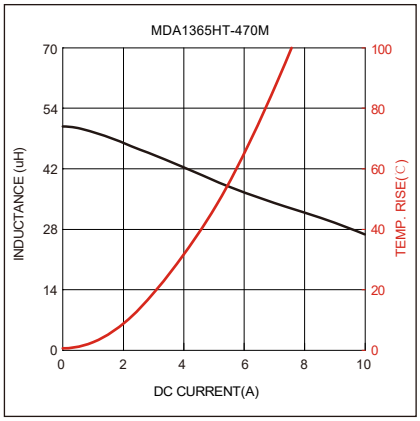




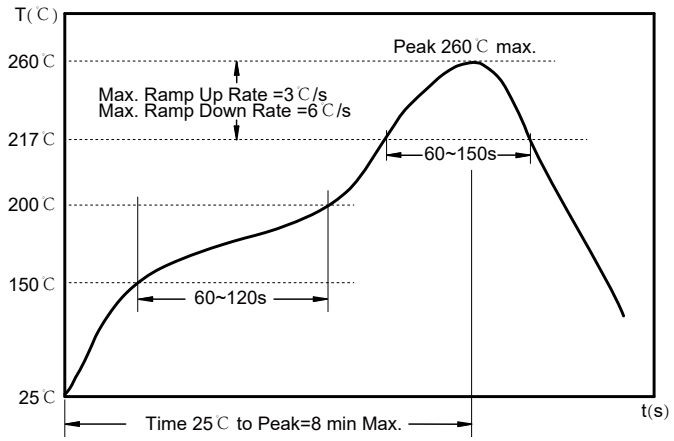




Typical Electrical Characteristics:



Soldering Reflow:



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

Allowed time above 217℃: 60~150 sec.

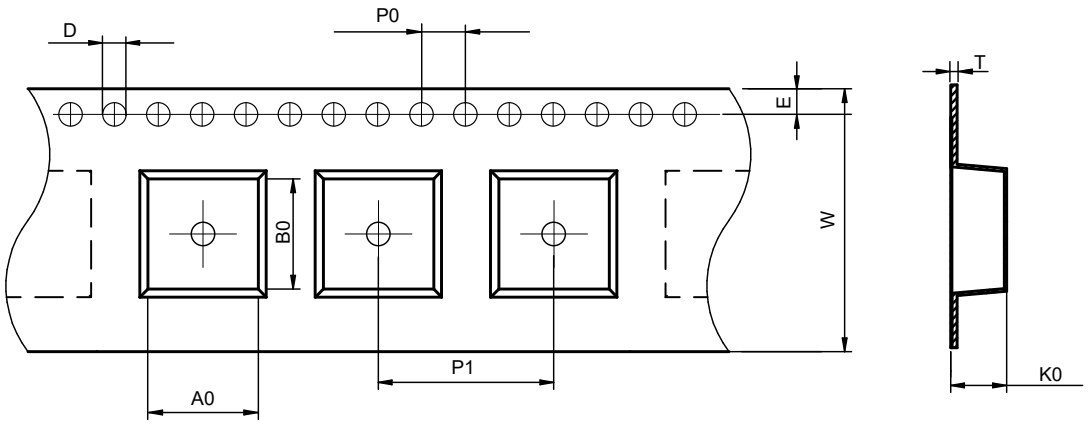
Max temperature: 260℃.

Max time at max temperature: 30 sec.

Allowed Reflow time: 2x max.

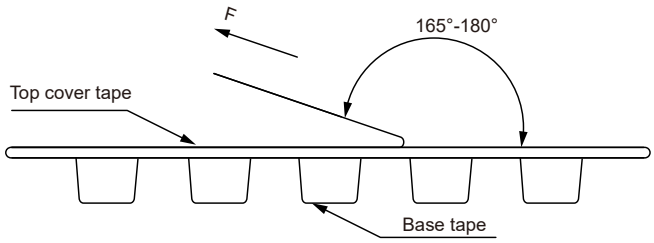
Packaging Information:

Tape Dimension:



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
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:

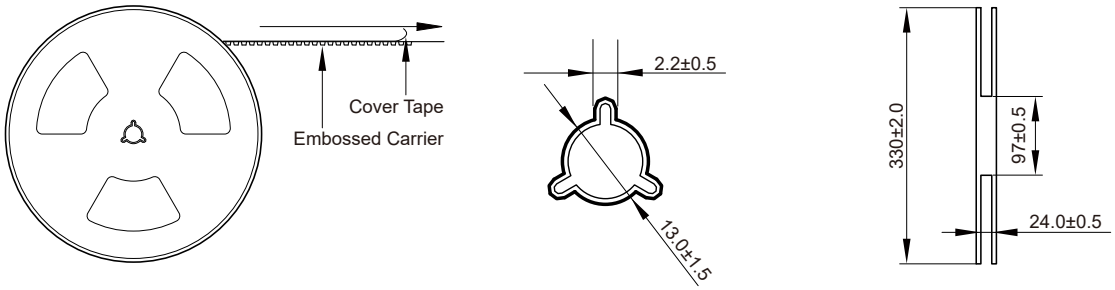


The peel force of top cover tape shall be between 0.1 to 1.3 N

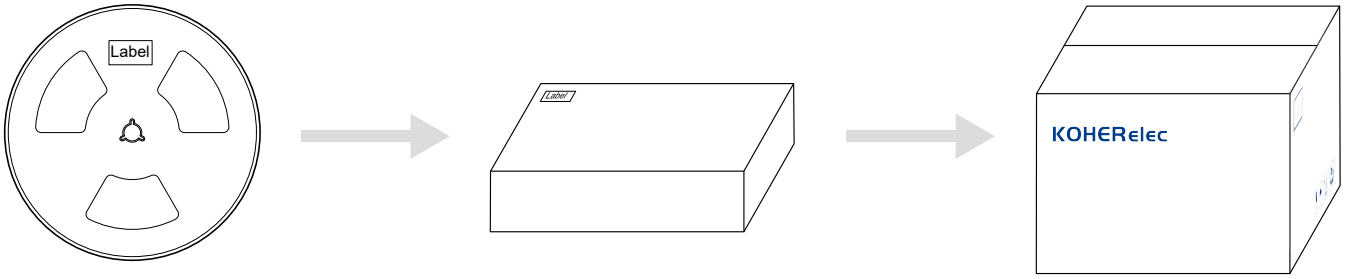
Product Marking:

Marking	KH+Printing (Inductance+period)

Reel Dimension: [mm]



Packaging Quantity:



500 Pcs/Reel

2 Reel /Inner box(1000 Pcs)

2 Inner box/Carton box(2K Pcs)

Cautions and Warnings:

Storage Conditions:

- 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.