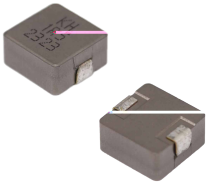
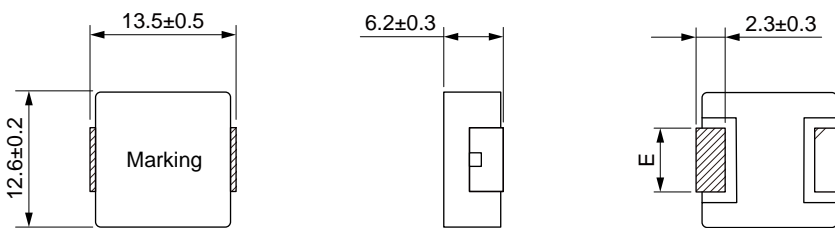


## SMD Low Profile High Current Molded Inductor Size 1365

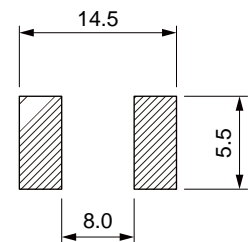


- Shielded construction
  - Capable of corresponding high frequency.
  - Low loss realized with low DCR.
  - High performance (Isat) realized by metal dust core.
  - Ultra low buzz noise, due to composite construction.
  - 100% Lead(Pb)-Free and RoHS compliant.
  - AEC-Q200 qualified
  - Operating temperature: -55 to +155 °C(including self-temperature rise)
  - Quantity: 500PCS
- 
- Noise filter for various drive circuitry requiring high temperature operation and peak current handling capability.
  - Boost-Converter
  - Buck-Converter DC/DC

### Dimensions: [mm]



### Land Pattern: [mm]



### Electrical Properties:

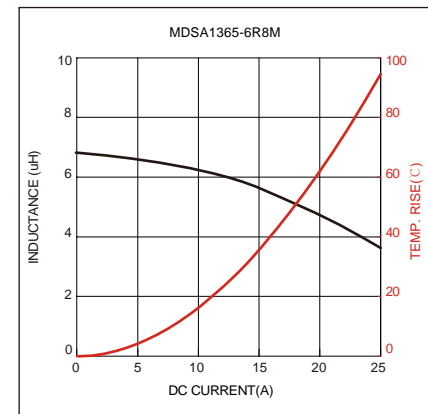
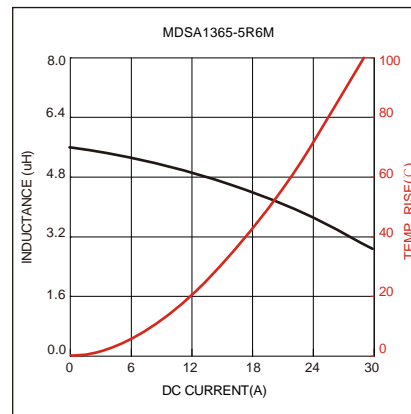
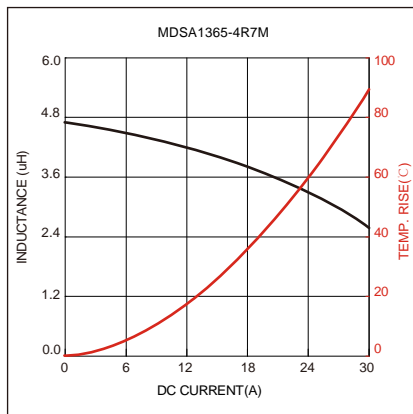
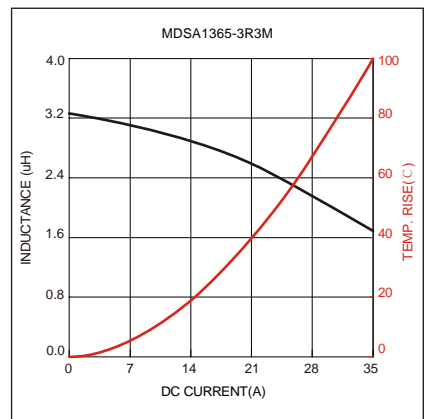
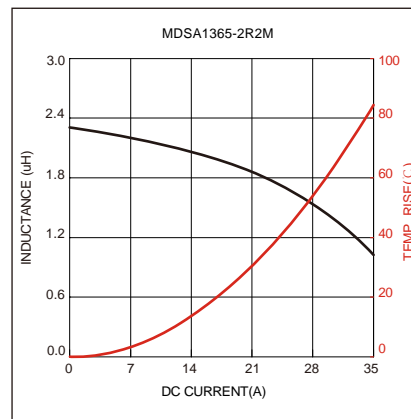
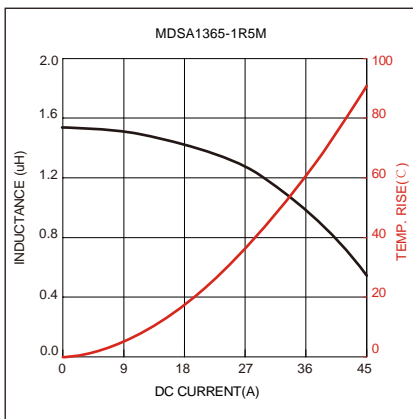
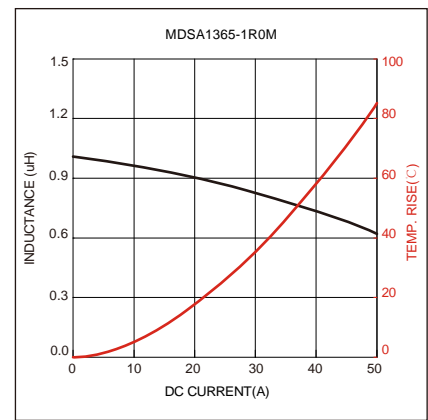
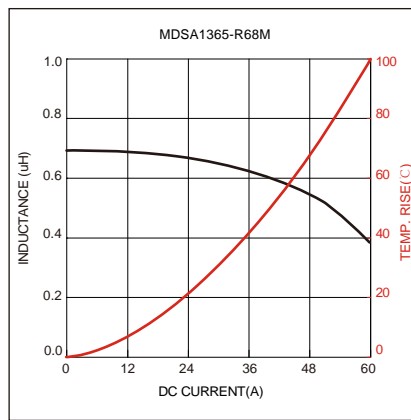
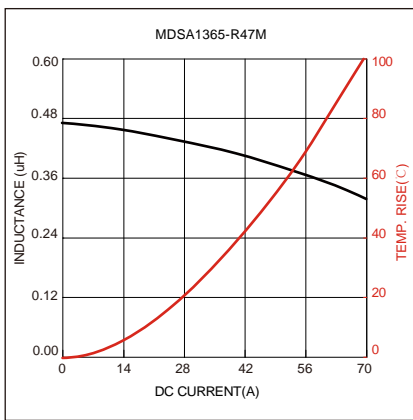
	( $\mu$ H)			Saturation	(m $\Omega$ )	(m $\Omega$ )	
MDSA1365-R47M	0.47	$\pm 20\%$	40.0	66.0	0.95	1.10	4.7 $\pm 0.3$
MDSA1365-R68M	0.68	$\pm 20\%$	35.0	54.0	1.40	1.60	4.0 $\pm 0.3$
MDSA1365-1R0M	1.00	$\pm 20\%$	32.0	44.0	1.60	1.90	4.0 $\pm 0.3$
MDSA1365-1R5M	1.50	$\pm 20\%$	28.0	34.0	2.30	2.70	4.0 $\pm 0.3$
MDSA1365-2R2M	2.20	$\pm 20\%$	24.0	28.0	3.90	4.40	4.7 $\pm 0.3$
MDSA1365-3R3M	3.30	$\pm 20\%$	21.0	26.0	5.50	6.50	4.7 $\pm 0.3$
MDSA1365-4R7M	4.70	$\pm 20\%$	19.0	24.0	7.20	8.40	4.7 $\pm 0.3$
MDSA1365-5R6M	5.60	$\pm 20\%$	17.5	22.0	8.80	10.3	4.7 $\pm 0.3$
MDSA1365-6R8M	6.80	$\pm 20\%$	16.0	20.0	10.2	11.8	4.7 $\pm 0.3$
MDSA1365-8R2M	8.20	$\pm 20\%$	14.5	18.5	12.5	14.5	4.7 $\pm 0.3$
MDSA1365-100M	10.0	$\pm 20\%$	12.5	16.5	13.8	16.8	4.7 $\pm 0.3$
MDSA1365-150M	15.0	$\pm 20\%$	10.6	13.0	23.0	27.0	4.7 $\pm 0.3$

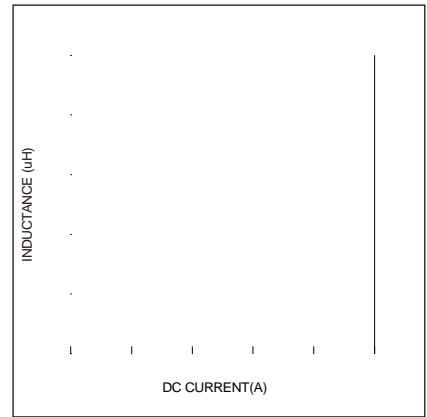
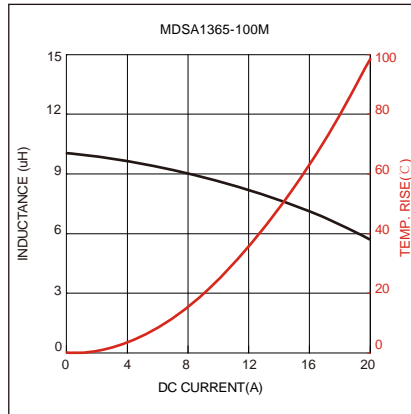
	( $\mu\text{H}$ )			Satura on	(m )	(m )	
MDSA1365-220M	22.0	$\pm 20\%$	9.60	9.80	32.0	36.0	4.7 $\pm$ 0.3
MDSA1365-330M	33.0	$\pm 20\%$	8.70	8.80	47.0	56.0	4.7 $\pm$ 0.3
MDSA1365-470M	47.0	$\pm 20\%$	7.80	7.50	60.0	69.0	4.7 $\pm$ 0.3
MDSA1365-680M	68.0	$\pm 20\%$	5.60	5.80	85.0	103.0	4.7 $\pm$ 0.3

Saturation Current will cause L to drop approximately 30%

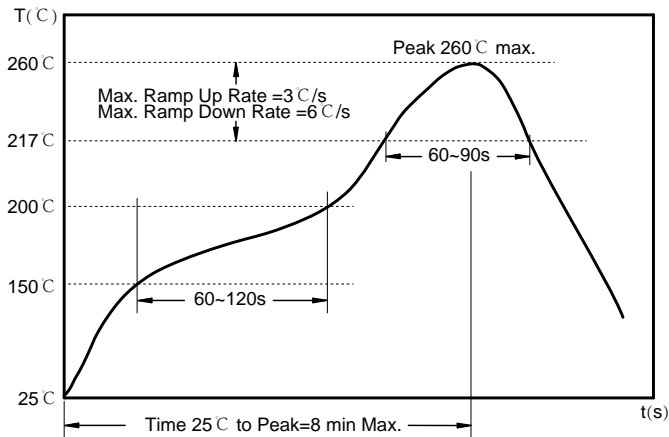
Temperature Rise Current: The actual value of DC current when the temperature rise is  $\Delta T=40^\circ\text{C}$

## Typical Electrical Characteristics:





## Soldering Reflow:



Preheat condition: 150 ~200°C / 60~120 sec.

Allowed time above 217°C : 60~90 sec.

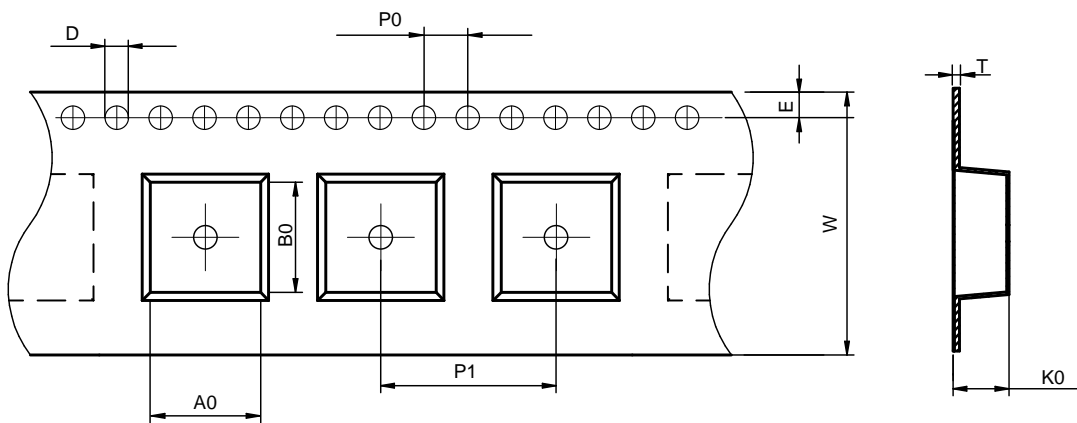
Max temperature: 260°C.

Max time at max temperature: 10 sec.

Allowed Reflow time: 2x max.

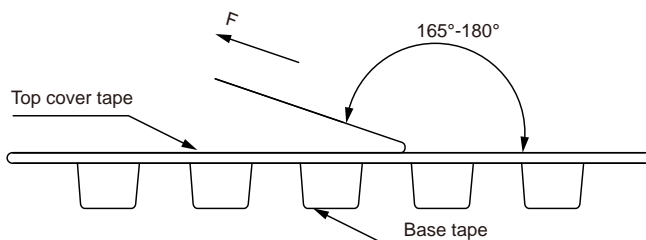
## Packaging Information:

### Tape Dimension :



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDSA1365	13.1±0.1	14.0±0.1	1.5±0.1	4.0±0.1	16.0±0.1	24.0±0.3	6.8±0.1	1.75±0.1	0.50±0.05

### Peel force of top cover tape:

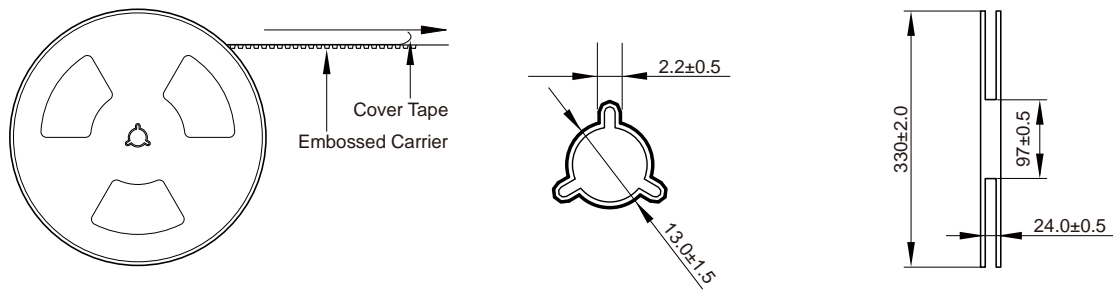


The peel force of top cover tape shall be between 0.1 to 1.3 N

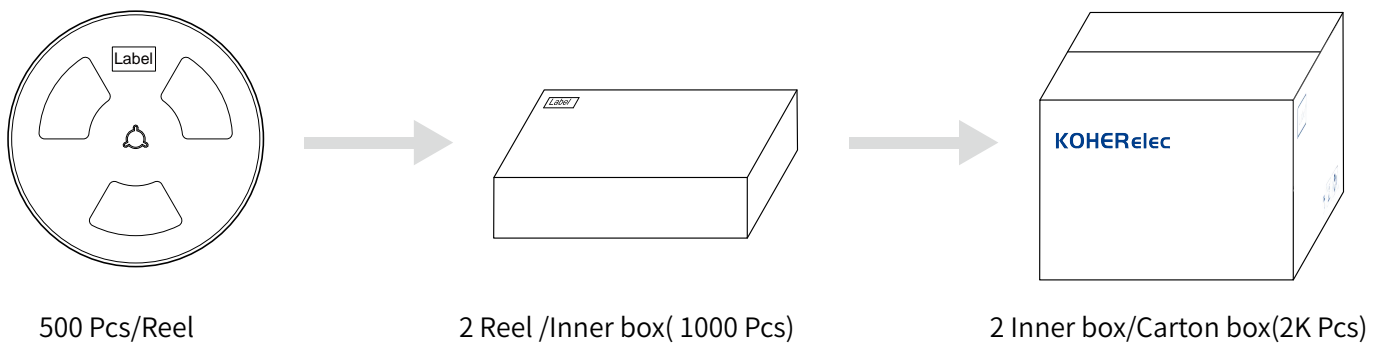
### Product Marking:

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



## Packaging Quantity:



## 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.