



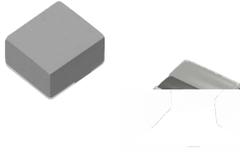
# MDTA Series

## SMD Low Profile High Current Molded Inductor

### Size 20161A

#### FEATURES

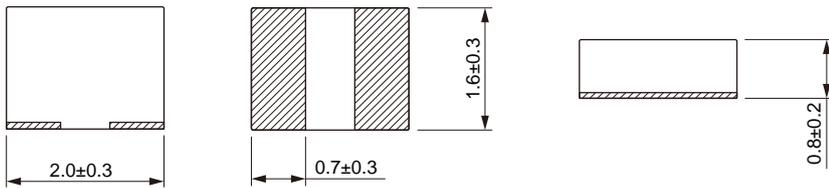
- High current, low DCR, high efficiency.
- Very low acoustic noise and very low leakage flux noise.
- AEC-Q200 qualified
- 100% Lead(Pb)-Free and RoHS compliant.
- Operating temperature: -55 to +155 °C (including self-temperature rise)
- Quantity: 3000PCS



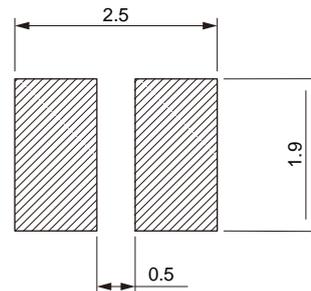
#### APPLICATION

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

#### Dimensions: [mm]



#### Land Pattern: [mm]

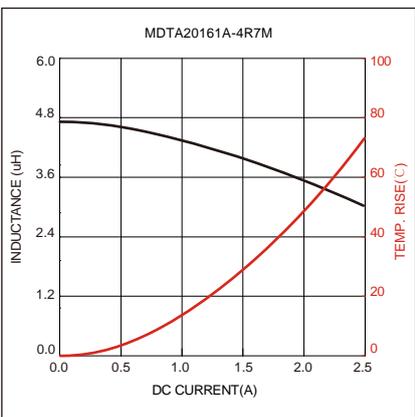
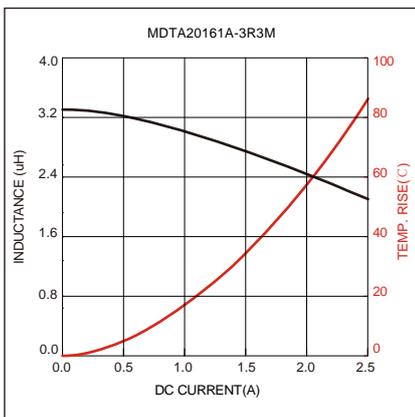
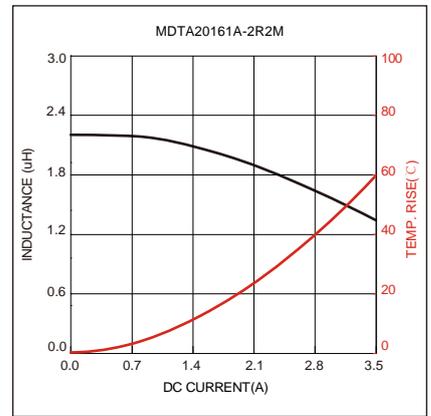
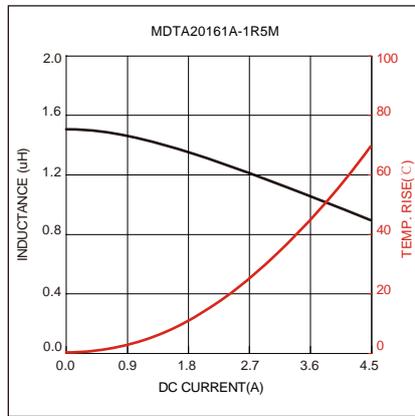
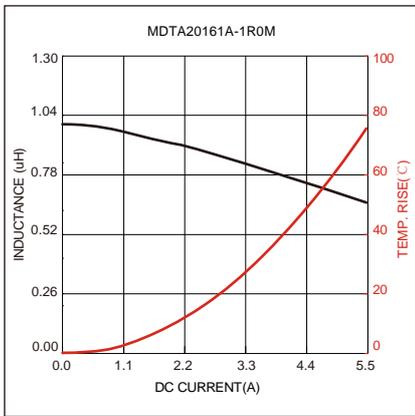
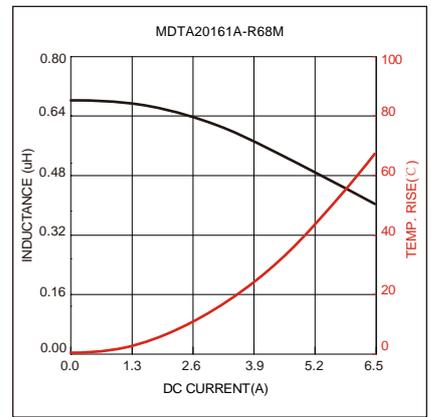
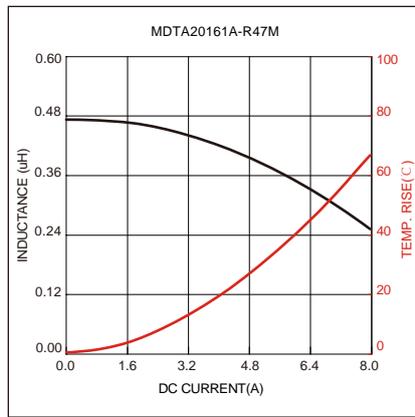
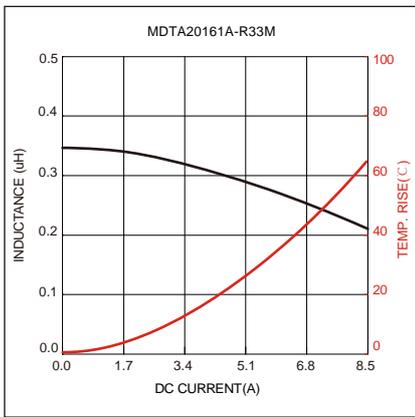
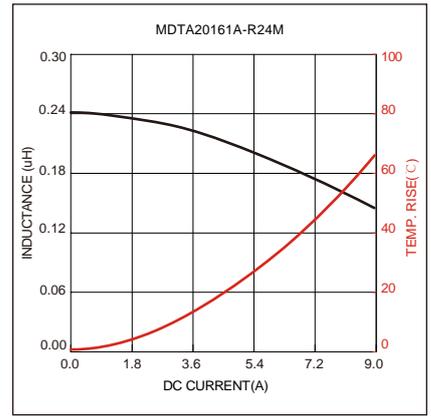
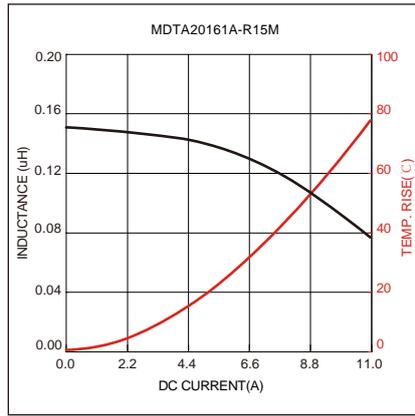
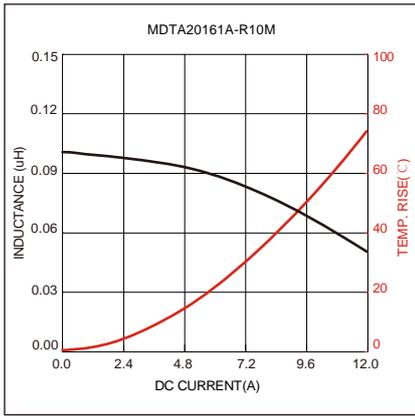


#### Electrical Properties:

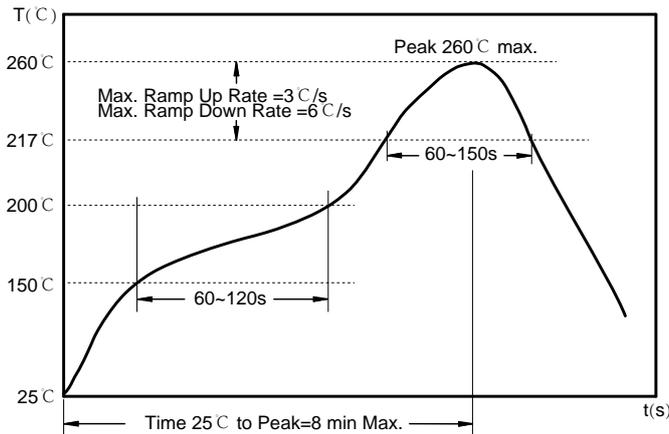
	(μH)			(mΩ)				(mΩ)	
MDTA20161A-R24M	0.24	±20%	6.8	6.2	7.3	7.0	15	18	
MDTA20161A-R33M	0.33	±20%	6.5	6.0	7.0	6.5	17	20	
MDTA20161A-R47M	0.47	±20%	6.0	5.5	6.3	5.5	19	22	
MDTA20161A-R68M	0.68	±20%	5.0	4.5	5.2	4.7	24	31	
MDTA20161A-1R0M	1.00	±20%	4.0	3.7	4.8	4.2	38	46	



# Typical Electrical Characteristics:



## Soldering Reflow:



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

Allowed time above 217 C : 60~150 sec.

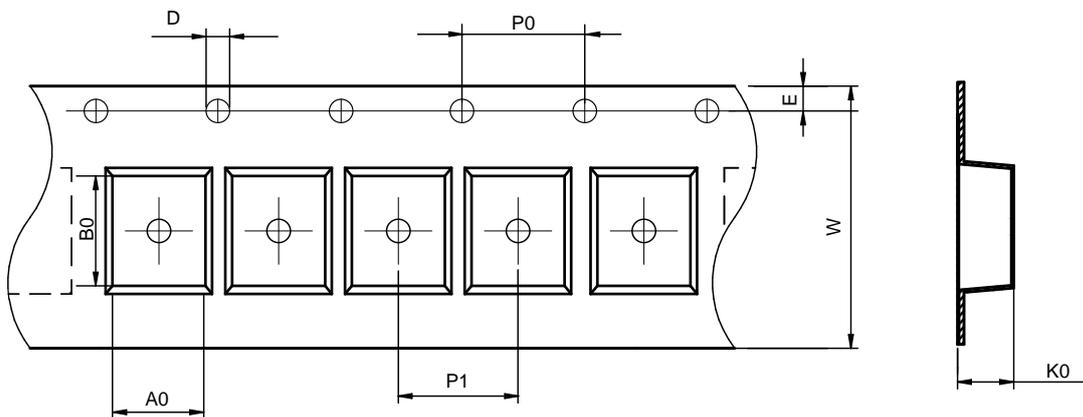
Max temperature: 260 C .

Max time at max temperature: 10 sec.

Allowed Reflow time: 3x max.

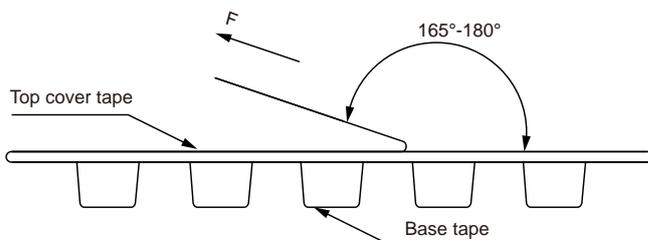
## Packaging Information:

### Tape Dimension :



Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTA20161A	1.9± 0.1	2.3± 0.1	1.5± 0.1	4.0± 0.1	4± 0.1	8.0± 0.3	1.2± 0.1	1.75± 0.1	0.25± 0.05

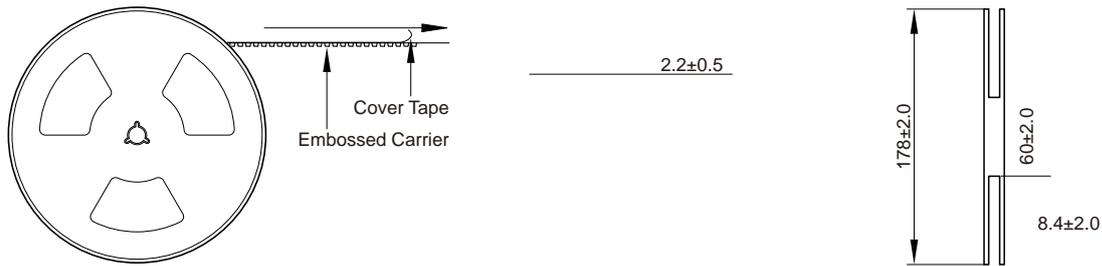
### Peel force of top cover tape:



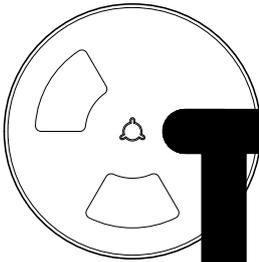
The peel force of top cover tape shall be between 0.1 to 0.98 N



## 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  $35^{\circ}\text{C}$ , humidity: 75% RH Max). If the storage period elapses, the soldering of the terminal electronics 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  $150^{\circ}\text{C}$ .
- 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.