

DMMA Series

Molded Inductor

Size 7078



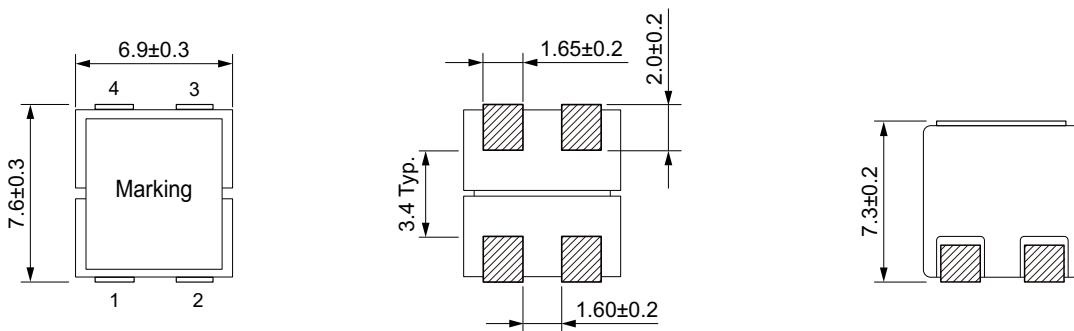
FEATURES

- Low loss realized with low DCR.
- High performance 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 +125 °C (including self-temperature rise)
- Quantity: 600PCS

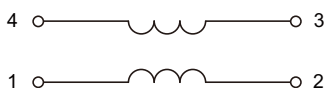
APPLICATION

- Automotive applications

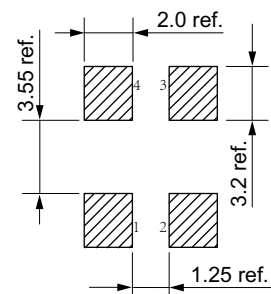
Dimensions: [mm]



Schematic:



Land Pattern: [mm]



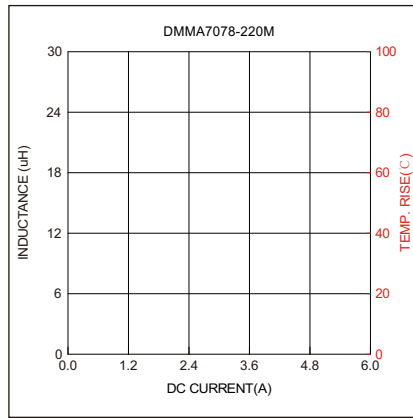
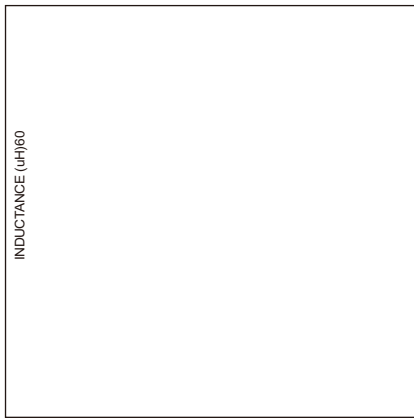
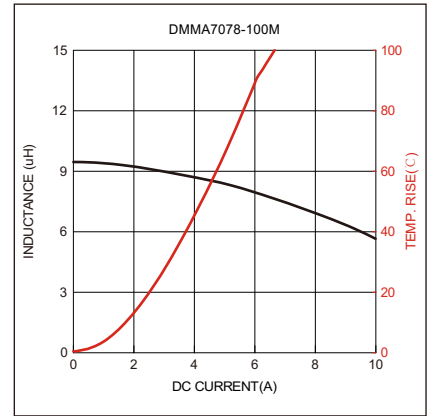
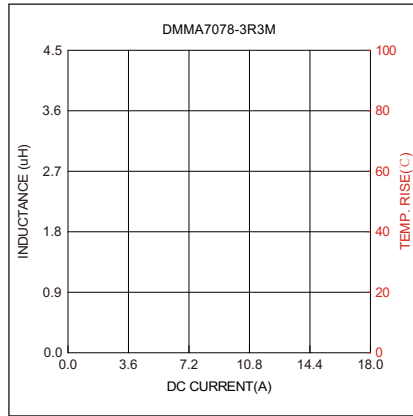
Electrical Properties:

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)
DMMA 7078-1R0M	1.0	±20%	9.8	8.8	19.3	16.5	6.5
DMMA 7078-3R3M	3.3	±20%	5.7	5.1	13.0	11.1	19.2
DMMA 7078-100M	10.0	±20%	3.5	3.2	6.8	5.8	49.0
DMMA 7078-150M	15.0	±20%	2.7	2.4	6.0	5.1	90.0
DMMA 7078-220M	22.0	±20%	2.2	2.0	4.3	3.7	134

Saturation Current will cause L to drop approximately 30%

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

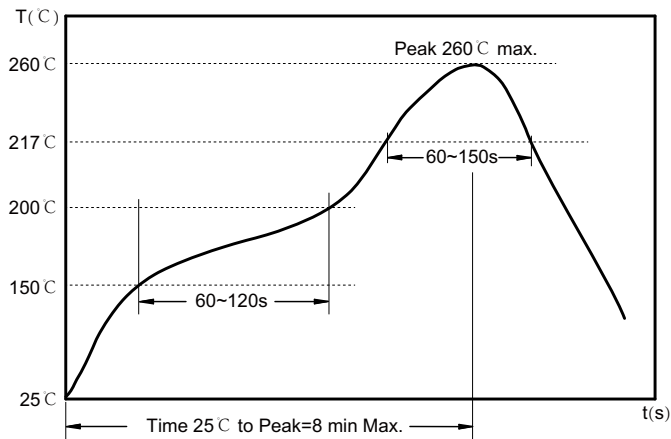
Typical Electrical Characteristics:



80

80

Soldering Reflow:



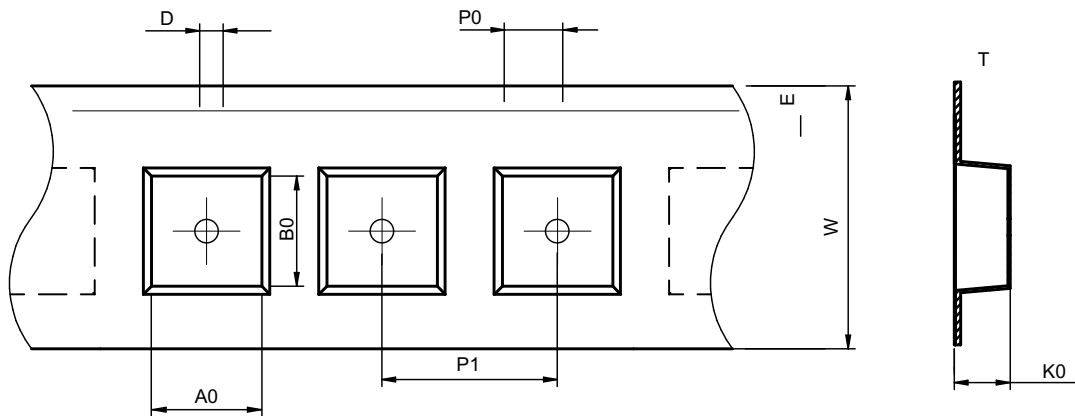
Preheat condition: 150 ~200 °C / 60~120 sec.

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

Max temperature: 260 °C.

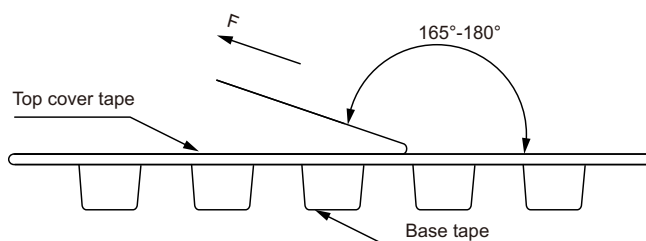
Packaging Information:

Tape Dimension:



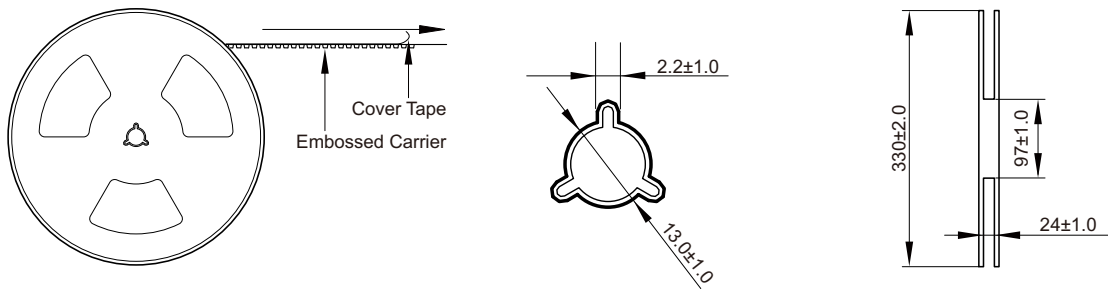
Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
DMMA7078	8.1±0.1	7.3±0.1	1.50±0.1	4.0±0.1	12.0±0.1	24.0±0.3	7.8±0.1	1.75±0.1	0.5±0.1

Peel force of top cover tape:

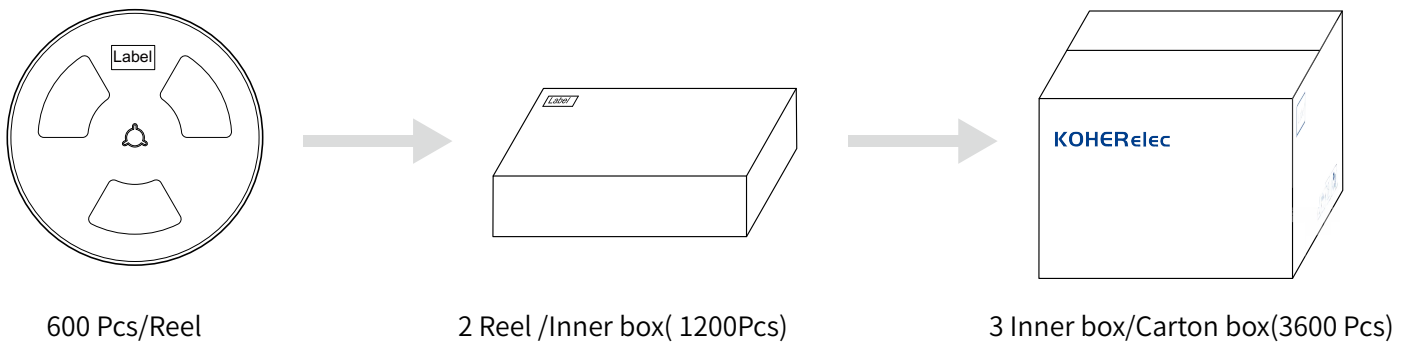


The peel force of top cover tape shall be between 0.1 to 1.3 N

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°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.