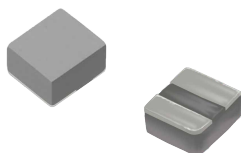


MDTP-E Series

Mini Molding Power Inductors

Size 25201A



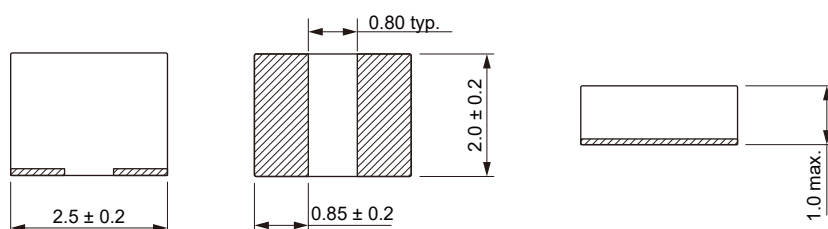
FEATURES

- High performance (Isat) realized by metal dust core.
- Low loss realized with low Rdc.
- Closed magnetic circuit design reduces leakage flux.
- Compliance with RoHS and Halogen Free.
- Operating temperature: -55 to +125°C (including self-temperature rise)
- Quantity: 3000pcs

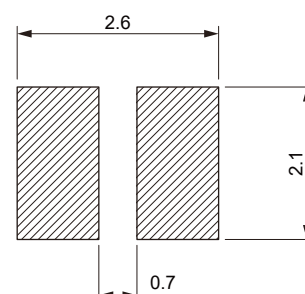
APPLICATION

- DC/DC converters
- Note PC power system, incl. IMVP-6
- Wi-Fi module, VR, AR, HDDs, DSCs, etc

Dimensions: [mm]



Land Pattern: [mm]



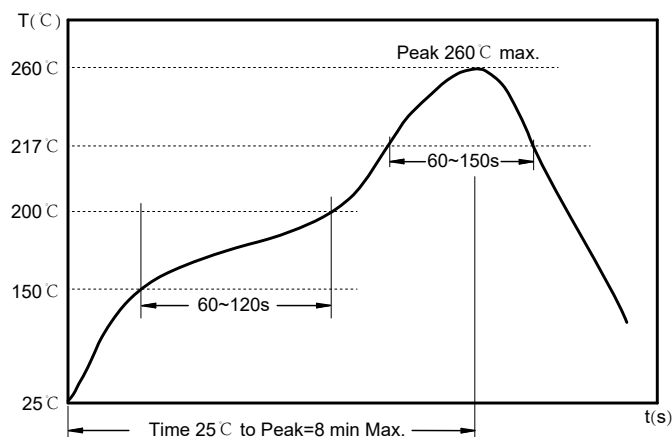
Electrical Properties:

Part No	Inductance @ 1MHz/1V (μH)	Tolerance	Temperature Rise Current Typ. (A)	Temperature Rise Current Max. (A)	Saturation Current Typ. (A)	Saturation Current Max. (A)	DC Resistance Typ. (mΩ)	DC Resistance Max. (mΩ)
MDTP25201A-R22M-E	0.22	±20%	6.8	6.5	8.4	7.6	12.0	17.0
MDTP25201A-R24M-E	0.24	±20%	6.5	6.1	8.0	7.4	12.0	17.5
MDTP25201A-R33M-E	0.33	±20%	6.0	5.6	7.3	6.7	17.0	21.0
MDTP25201A-R47M-E	0.47	±20%	5.8	5.2	6.6	6.0	18.0	25.0
MDTP25201A-R68M-E	0.68	±20%	5.4	4.8	5.4	4.8	23.0	30.0
MDTP25201A-1R0M-E	1.00	±20%	4.3	3.8	4.5	4.0	28.0	35.0
MDTP25201A-1R5M-E	1.50	±20%	3.2	2.8	3.9	3.5	50.0	65.0
MDTP25201A-2R2M-E	2.20	±20%	2.4	2.1	3.0	2.6	65.0	80.0
MDTP25201A-3R3M-E	3.30	±20%	2.2	1.8	2.4	1.8	100	120
MDTP25201A-4R7M-E	4.70	±20%	1.9	1.5	2.3	1.9	170	200
MDTP25201A-6R8M-E	6.80	±20%	1.5	1.3	2.2	1.7	270	320
MDTP25201A-100M-E	10.0	±20%	1.1	1.0	1.3	1.1	500	560

Saturation Current will cause L to drop approximately 30%

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

Soldering Reflow:



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

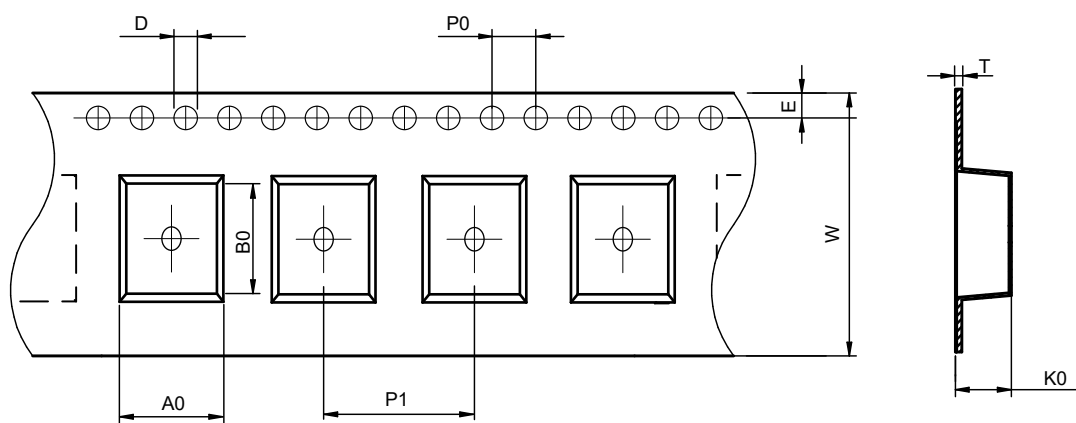
Allowed time above 217 °C : 60~150 sec.

Max temperature: 260 °C .

Max time at max temperature: 10 sec.

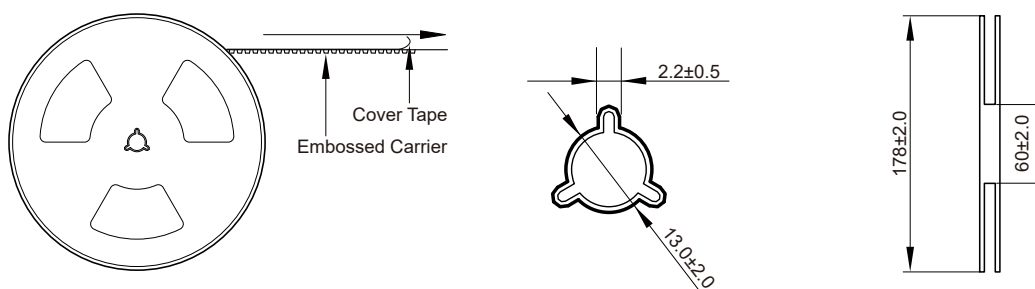
Packaging Information:

Tape Dimension:

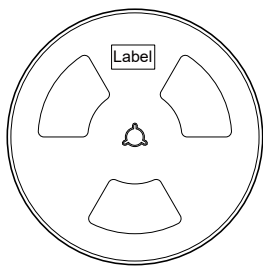


Series	A0 (mm)	B0 (mm)	D (mm)	P0 (mm)	P1 (mm)	W (mm)	K0 (mm)	E (mm)	T (mm)
MDTP25201A-E	2.45±0.1	2.80±0.1	1.0±0.2	4.0±0.1	4.0±0.1	8.0±0.1	1.20±0.1	1.75±0.1	0.25±0.05

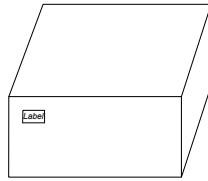
Reel Dimension: [mm]



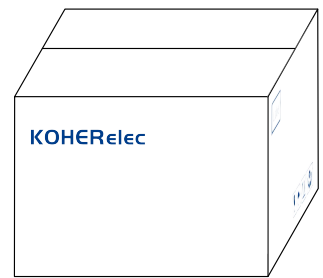
Packaging Quantity:



3000 Pcs/Reel



5 Reel /Inner box(15K Pcs)



8 Inner box/Carton box(120K 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.
- 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.