# Molded Power Inductor

# ET1040-150M

2025-05-29 Rev. 0

RoHS COMPLIANT

## A. FEATURES:

- Halogen Free & ROHS compliant.
- Low profile and low DCR
- Magnetically Shielded construction, low EMI
- Minimized acoustic noise and minimized leakage flux noise
- High current carrying capacity, Low core loss

## B. APPLICATIONS:

- PC/TV, and server applications
- DC/DC converter for CPU in Notebook / PC /PDA
- VRM for server
- DC switching power supply circuit

## C. PRODUCT IDENTIFICATION:

| ET | 1040 | - | 150 | M |
|---|---|---|---|---|
| ① | ② | | ③ | ④ |

① Eastever Molded Power Inductor(ET)
② Product dimensions (1040:11.0X10.2X4.0 mm)
③ Inductance Value (150: 15uH )
④ Inductance Tolerance ( M= ± 20% )


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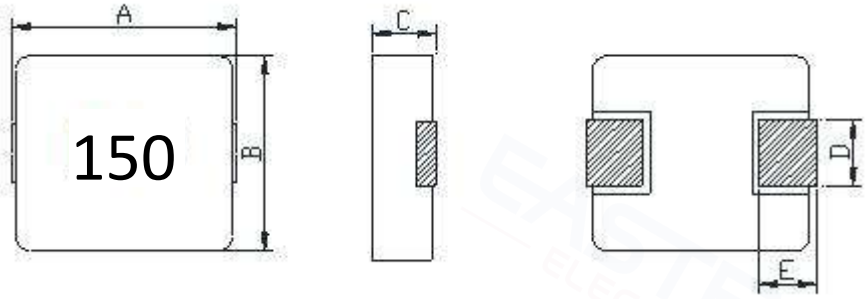
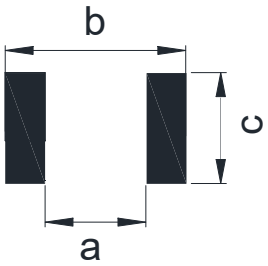
## D. MECHANICAL(unit:mm)



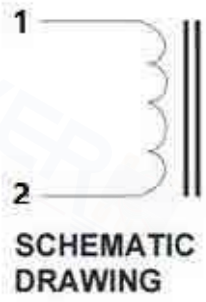

| A | B | C | D | E |
|---|---|---|---|---|
| 11.0±0.5 | 10.2±0.3 | 4.0 Max | 3.0±0.3 | 2.0±0.5 |

## E. RECOMMENDED LAND PATTERN (UNIT: mm)

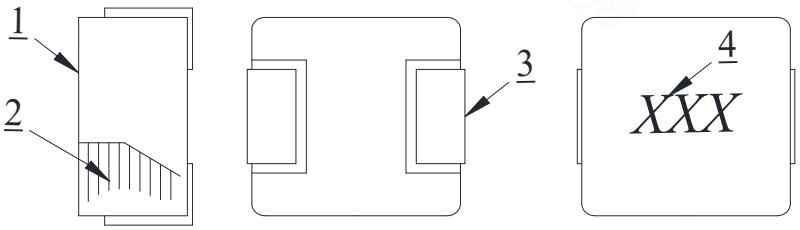



| | |
|---|---|
| a | 6.0 Ref |
| b | 11.8 Ref |
| c | 3.5 Ref |

## F. SCHEMATIC:




## G. STRUCTURE




| No. | PARTS | MATERIAL |
|---|---|---|
| ① | CORE | Alloy powder |
| ② | WIRE | Polyester imine enameled wire |
| ③ | BASE | Silver white material slice |
| ④ | INK | Black |

## H. Electrical Specifications

| Part No. | Inductance (uH) | D.C.R. (mΩ) | Isat(A) | Irms (A) |
|---|---|---|---|---|
| | ±20% | Max | Typical | Typical |
| ET1040-150M | 15.0 | 75 | 6.0 | 8.0 |

※ All test data is referenced to 25°C ambient;

※ Test Condition:100KHz, 1.0Vrms;

※ Saturation current(Isat): DC current at which the inductance drops approximate 30% TYP from its value without current;

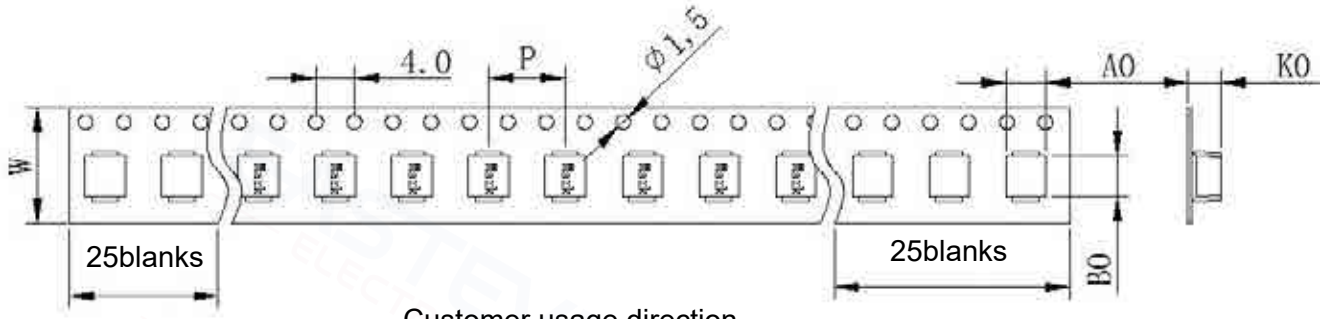
※ Temperature rise current(Irms): DC current that causes the temperature rise (△T =40°C) from 25°C ambient;

※ Operating Temperature Range: -45℃ to +125℃

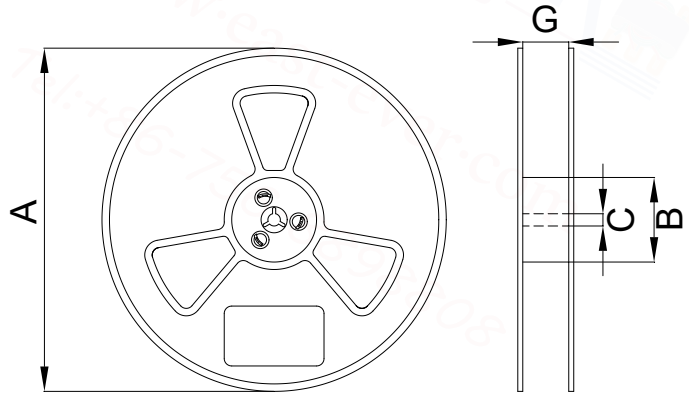
## I . DIMENSIONS FOR CARRIER TAPES（unit:mm)

### I .1 Tape and Reel(mm):

| ITEM | W | A0 | B0 | K0 | P |
|---|---|---|---|---|---|
| DIM | 24.00 ±0.30 | 10.6 ±0.20 | 11.8 ±0.20 | 4.20 ±0.15 | 16.00 ±0.10 |




Customer usage direction




| REEL SPEC | 13" |
|---|---|
| A | 330.0 |
| B | 100.0 |
| C | 13.0 |
| G | 25.0 |

Carton dimensions and packing quantity:

| Product Series | Quantity/Reel | Inner Carton Quantity | Out Carton Quantity |
|---|---|---|---|
| ET1040 | 1000pcs | 2000pcs | (2000*3)=6000pcs |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## J . SOLDERING CONDITIONS

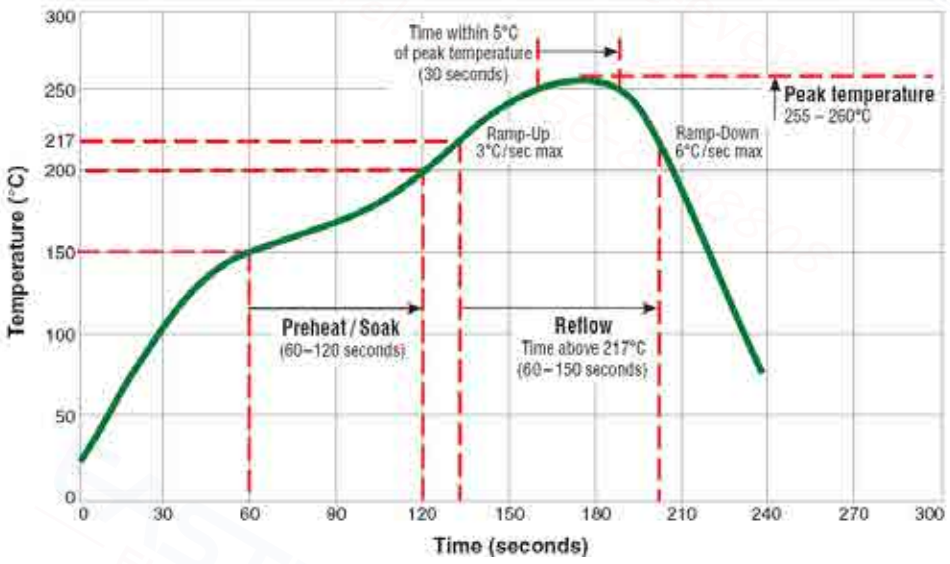
Applicable soldering process to the products is refl.

### J .1 Soldering Materials

(1)Solder:Sn-3.0Ag-0.5Cu

(2)Flux:Use rosin-based flux,but not strongly acidic flux (with xhlorine exceeding 0.2wt %).Do not use water-soluble flux.

### J . 2 Reflow Soldering Profile




Reworking with electric solding iron must preheating at 150℃ for 1 minute is required,and do not directly touch the core with the tip of the soldering iron.The reworking soldering conditions are as follows.

① Temperature of soldering iron tip:350℃;

② Soldering iron power output:≤30W;

③ Diameter of soldering iron end:≤1.0mm;

④ Soldering time:＜3 s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