

MSCP74-150MT

Wire Wound SMD Coupled Power Inductor

FEATURES

- High efficiency, high coupling
- High rated current, low DC resistance
- Operate temperature range $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$ (Including self temp. rise)
- RoHS compliant

APPLICATIONS

- SEPIC, Zeta, Flyback topology, etc.
- LED, power supplies
- Used as common mode choke
- Used as transformer
- Widely used in buck converter, laptop, displayer, network communication equipment, and etc.

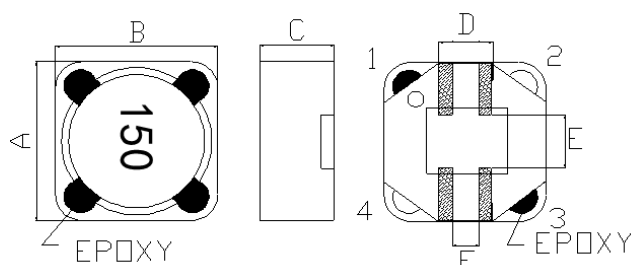
Explanation of Part Number

MSCP 74 -101 M T

1 2 3 4 5

- ◆ 1:Product Series:Wire Wound SMD Coupled Power Inductors
- ◆ 2:Dimensions:
- ◆ 3: Nominal Inductance: 101 = 100uH
- ◆ 4:Inductance Tolerance:M:+/-20%
- ◆ 5.Packing:Tape Carrier Package

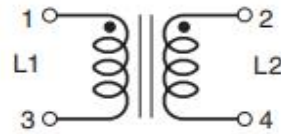
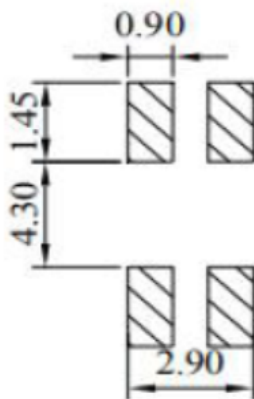
Dimensions: [mm]



| ITEM | A | B | C | D | E | F |
|------|------|------|-----|-----|-----|-----|
| DIM | 7.3 | 7.3 | 4.6 | 2.6 | 2.9 | 1.1 |
| TOLE | ±0.3 | ±0.3 | Max | Typ | Typ | Typ |

Land Pattern: [mm]

SCHEMATIC:

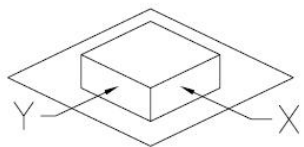


Electrical Properties:

| Part Number | Inductance L1=L2 (uH) @100KHz/0.25V | DC Resistance L1=L2 (mΩ) Max. | Isat L1=L2 (A)Max. | Marking |
|--------------|---|--------------------------------------|--------------------------|---------|
| MSCP74-150MT | 15 ±20% | 150 | 2.1 | 150 |

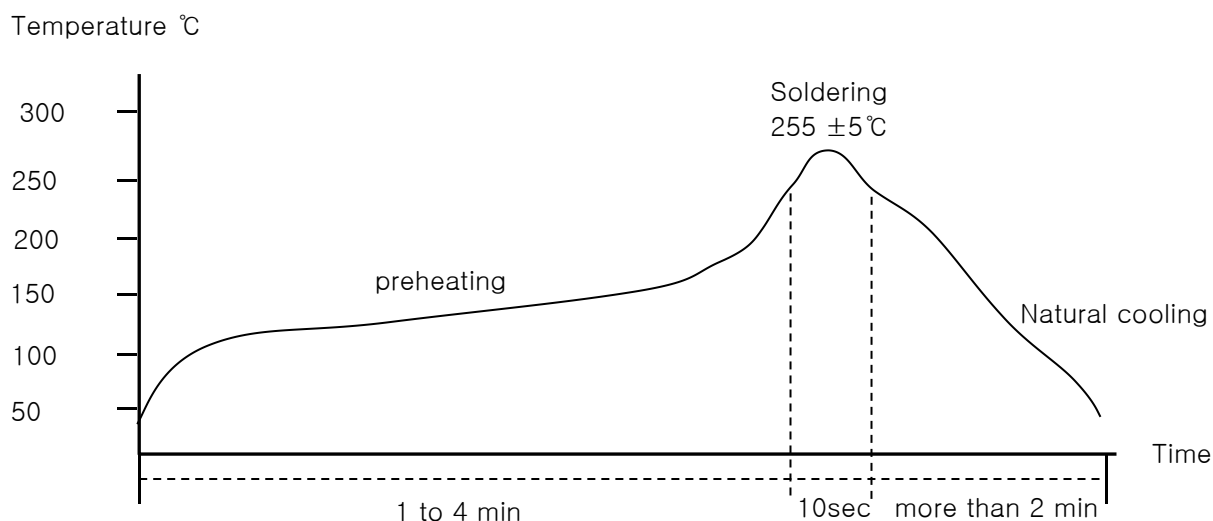
Isat: Base on temp.rise & $\Delta L/L0A \leq 25\%$ Max

RELIABILITY TESTING

| | |
|---|--|
| Operating Temperature | - 40 to +125 °C (Contain Heating coil) |
| Appearance Inspection | No external defects by visual inspection |
| Terminal Strength  | After soldering , between copper plaet and terminals of coils , push in two directions of X , Y with standing 10N(1.02kg) for10+/-2 sec. Terminal should not peel off. (Refer to figure at right) |
| Heat endurance of reflow soldering | Refer to figure |
| Insulating resistance | Over 100 MΩ at 100V D.C . between wire and core |
| Dielectric Strength | Apply at 0.5KV 3mA for 1 minute between wire and core |
| Temperature characteristics | Inductance coefficient (0~2,000) × 10 / °C (- 40~ + 125 °C) |
| Humidity characteristics | Inductance deviation within ± 10% , after 96 hours in 90~95% relative humidity at 40 ± 2 °C and 1 hours drying under normal condition |

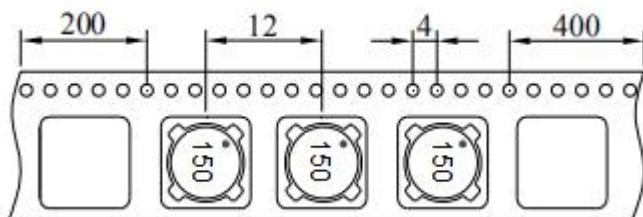
A test is made under the above mentioned condition , and it is kept for 2 hours in the normal

IR Reflow profile

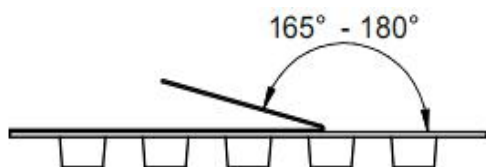


Temperature and humidity . After that , no mechanical and electrical defect should be found .

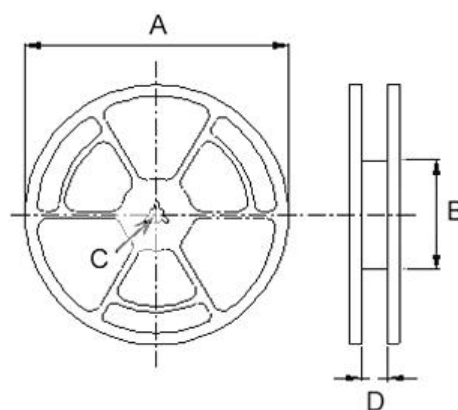
PACKING LIST



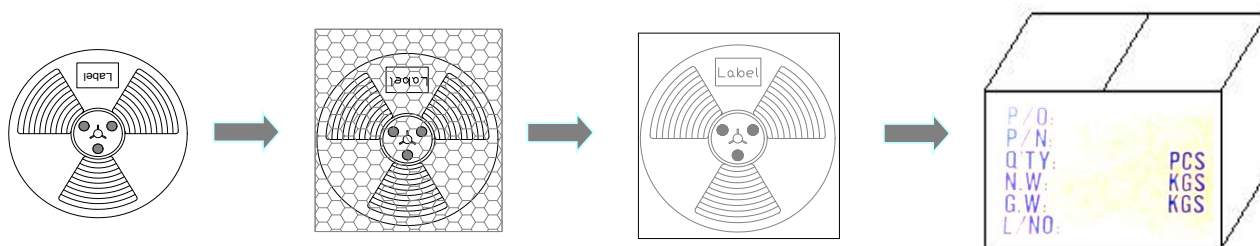
| Tape width | Distance | Pull-of force |
|------------|----------|---------------|
| 16 mm | 12 mm | 20~120g |



| Reel Dimensions (Unit: mm) | | | | Quantity |
|----------------------------|-----|----|------|----------|
| A | B | C | D | Pcs/Reel |
| 330 | 100 | 13 | 16.5 | 1000 |



裝箱數量:
Package Quantity



| Series | MPQ | Inner box | full container load |
|--------|------|-----------|---------------------|
| 74 | 1000 | 3000 | 15000 |