

承 认 书

APPROVAL SHEET

客户名称: _____

CUSTOMER _____

品 名: _____ 消 磁 电 阻 _____

PARTNAME DEGAUSSING PTC THERMISTOR

规 格: _____ MZ71-18RM _____

SPECIFICATION _____

版本号: _____ 树脂包封型消磁电阻器 _____

VERSION _____

日 期: _____ 2018.10.13 _____

DATE _____

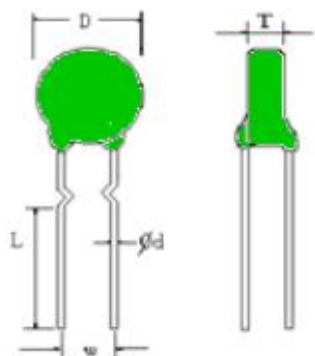
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1. Overview

MZ7 PTC thermistor are used as automatic degaussing components in color TVs and color displays, and current-limiting components in AC circuits.

2. Appearance specifications:



2.1 Dimensions(unit: mm)

| Code | Name | Technical Requirements | Lead shape |
|------|---------------|------------------------|-----------------------------------------------|
| D | Diameter | 14.5max | <input type="checkbox"/> Straight |
| T | Thickness | 6.0max | |
| L | Length | 3-5MM | <input type="checkbox"/> Axis bend |
| W | Pitch | 7.5±1.0 | |
| d | Lead diameter | 0.7±0.05 | <input checked="" type="checkbox"/> Informing |

2.2. Coating

| Coating | Material | Color |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Coating <input type="checkbox"/> No Coating | <input type="checkbox"/> Phenolic Resin <input checked="" type="checkbox"/> Silicone <input type="checkbox"/> Epoxy resin <input type="checkbox"/> Other | <input checked="" type="checkbox"/> Green <input type="checkbox"/> Red <input type="checkbox"/> Yellow <input type="checkbox"/> Black <input type="checkbox"/> Blue |

2.3 Marking

| Marking | Example |
|-------------------------------------------------------------------------------------|-------------------------|
| <input checked="" type="checkbox"/> Marked <input type="checkbox"/> Without Mark | <i>MZ71-18RM AC270V</i> |

2.4 Lead Wire

| | |
|-------------------------------------------------------|---------------------------------------------|
| <input checked="" type="checkbox"/> Tinned Steel Wire | <input type="checkbox"/> Tinned copper wire |
|-------------------------------------------------------|---------------------------------------------|

3.0 Part Numbering

MZ7 1 - 18R M
MZ7 — Type (degaussing PTC Thermistor)
1 — Welding type
18R — Nominal resistance value
M — Maximum allowable deviation of resistance value±30%

4.0 Electrical Performances

| No. | Item | Spec | Test Condition |
|-----|-----------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 4-1 | Nominal resistance | 18Ω±30% | Put it at 25±2°C for more than 2 hours, Test at voltage below 1.5VDC. |
| 4-2 | R-T characteristic | See Fig. 2 | R-T characteristic special tester. |
| 4-3 | Rated Voltage | 220 Vrms | Operating temperature range: -10°C~+60°C |
| 4-4 | Max Voltage | 270 Vrms | |
| 4-5 | Min degaussing coil resistance | 12Ω | |
| 4-6 | Current decay characteristics: Break into After 3 sec After 30 sec | >20 Ap-p <180 mAp-p <10 mArms | Temperature: 25±2°C, Test in still air, Test circuit: as shown in Fig. 1 Test voltage: 220Vrms (50-60Hz) |
| 4-7 | Curie temperature | 60±7°C | |

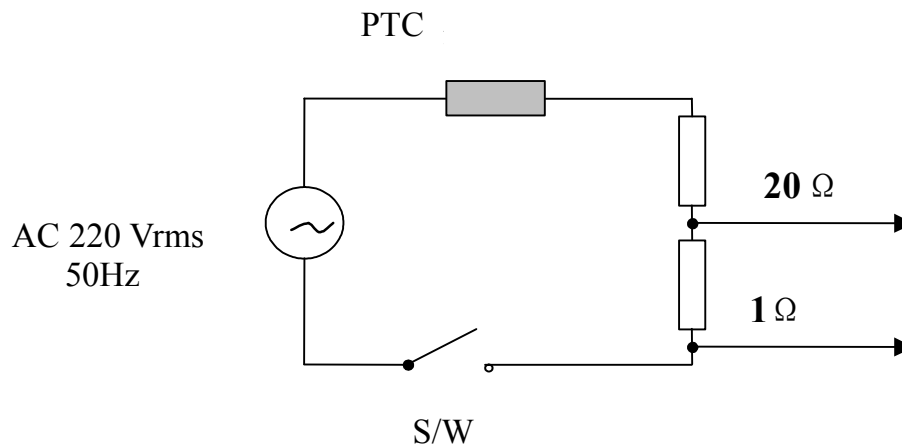


Fig. 1 Test circuit

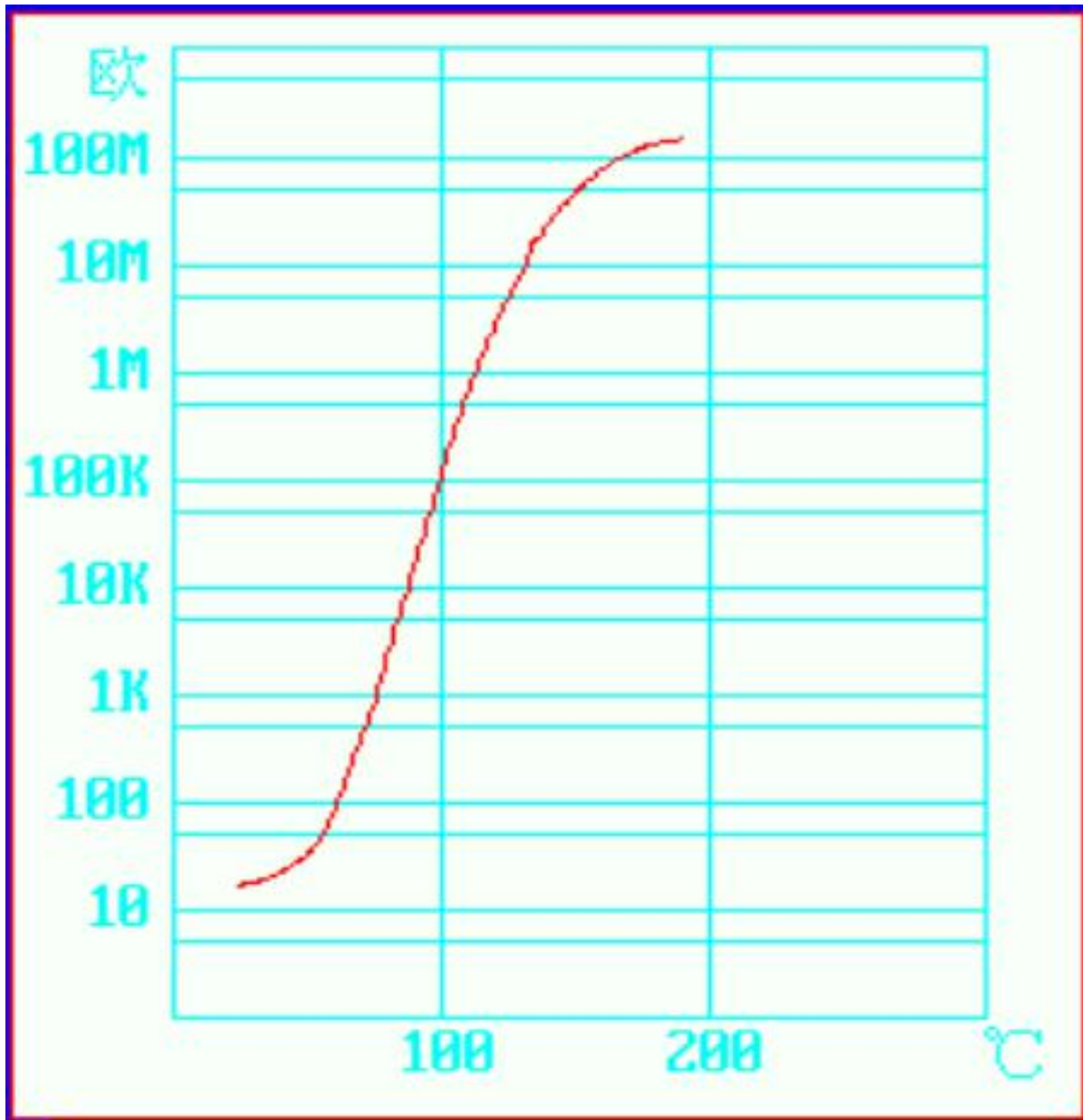


Fig. 2 Resistance-temperature characteristic curve

5.0 Reliability

| NO | <u>Item</u> | Technical Requirements | Test Method |
|-----|----------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5-1 | Terminal tensile strength | No visible damage | Fix the main body, slowly increase the force to 24.5N in the direction of each terminal, and hold for 10 seconds |
| 5-2 | Terminal bending strength | No visible damage | Fix the main body, apply a tension of 9.8N to the vertical direction of the terminal, and hold it for 10 seconds; then apply a tension of 9.8N in the opposite direction and hold it for 10 seconds |
| 5-3 | Anti-vibration performance | No visible damage Resistance change rate within $\pm 20\%$ | Fix the main body on the testing machine, apply a vibration wave with an amplitude of 0.75mm, (full amplitude 1.5mm), and a frequency of 10Hz~55Hz~10Hz; vibrate for 6 hours in 3 directions at right angles to each other |
| 5-4 | Solderability | More than 3/4 of the terminal is stained with solder | Immerse the terminal lead end into the $230\pm 5^{\circ}\text{C}$ solder solution $4\pm 1\text{mm}$ away from the main body, and keep it for 3 ± 0.5 seconds |
| 5-5 | Resistance to welding heat | No visible damage Resistance change rate within $\pm 20\%$ | Immerse the terminal lead end to $4\pm 1\text{mm}$ away from the main body Keep it in the solder solution at $350\pm 10^{\circ}\text{C}$ for 3~4 seconds. |

6.0 Precautions for use

(1) This product is designed based on color TVs and color displays used in general environments (room temperature, humidity, and pressure indoors). Therefore, if it is used in the following environments, it will malfunction (or Burn out), please do not use it in such an environment.

- ① Corrosive reducing gas (CL₂, H₂S, NH₃, SOX, NOX, etc.)
- ② Among volatile and flammable gases ③ A dusty place
- ④ The place where the pressure is reduced or increased
- ⑤ Places in direct contact with water or places with high humidity and easy condensation
- ⑥ Place in salt water, oil, liquid medicine, organic solution
- ⑦ Places with too much vibration ⑧ Other places similar to ①~⑦

(2) When PTC is abnormal, short-circuit current will flow, which may cause peculiar smell, abnormal sound, smoke, etc., please be sure to connect a current protector in series with this product as other protection devices.

(3) When PTC is working, depending on the site (environment), it may exceed 110°C. Please confirm whether it affects surrounding parts or materials. Not only will it affect the components or materials to degrade them, but the gas emitted from the components or materials will often become the cause of component degradation.

(4) Please connect the thermistor for the degaussing circuit to the PTC position in the analog circuit. In addition, the 3-terminal type should be connected according to the terminal number. If it is connected incorrectly, it will not have a demagnetization effect or cause damage to the components.

(5) This product does not have a waterproof structure and is not resistant to solvents. After water enters, it will decrease its characteristics or cause leakage accidents. Do not wash with water.

(6) When this product is soldered on a circuit board, in order to prevent component deterioration, please observe the following:

- ① Please use non-chlorine series for flux
- ② Please pay attention to the amount of flux used, and do not use flux to penetrate the terminal all the way into shell.

(7) This product is a ceramic product. Excessive compression and impact caused by falling will cause the component to crack and be damaged. Please pay attention when using it.

(8) Please use it below the rated voltage and above the rated degaussing coil impedance to avoid component damage.

(9) Please be sure to use it within the specified temperature range to avoid material deterioration and characteristic deterioration.