

Surge arrester

2-Electrode arrester

Series/Type: DG2R090M

Customer:

Version/Date: Issue 01/2014-8-9

Surge arrester

2-Electrode arrester

DG2R090M

| Features | Applications |
|--|---|
| <ul style="list-style-type: none"> ● Extremely small size ● Extremely fast response time ● Excellent SMD handling ● Stable performance over life ● Very low capacitance ● High insulation resistance ● RoHS-compatible ● UL-identification, No:E311500 | <ul style="list-style-type: none"> ● Splitter ● PCI Cards ● Morden ● Line cards |

Electrical specifications

| | | |
|--|----------------|--------|
| DC breakdown voltage ^{2) 3)} —Circuit current less than 2mA | 90 ±20 | V % |
| Impulse breakdown voltage ¹⁾ at 1kv/us -Typical values of distribution | ≤ 600 | V |
| Insulation resistance at DC 50V | ≥ 1 | GΩ |
| Capacitance at 1MHz ²⁾ | ≤ 0.8 | Pf |
| Service life ²⁾ | | |
| 10 operations 8/20us | 5 | KA |
| 10 operations 50Hz | 5 | A |
| Weight | ~1 | g |
| Storage and operations temperature | -40...+90 | °C |
| Climatic category (GB/T 9043, IEC61643-1) | 40/90/21 | |
| Marking,Red positive | Without | |

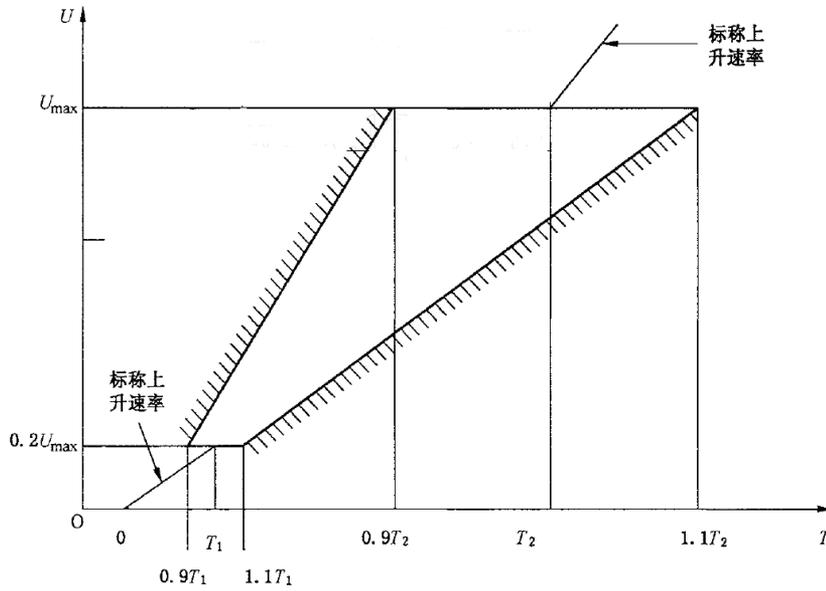


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DC breakdown voltage



8/20us, Test wave

$T_1 = 1.25T = 8\mu s \pm 20\%$

$T_2 = 20\mu s \pm 20\%$

10/700us, Test Wave

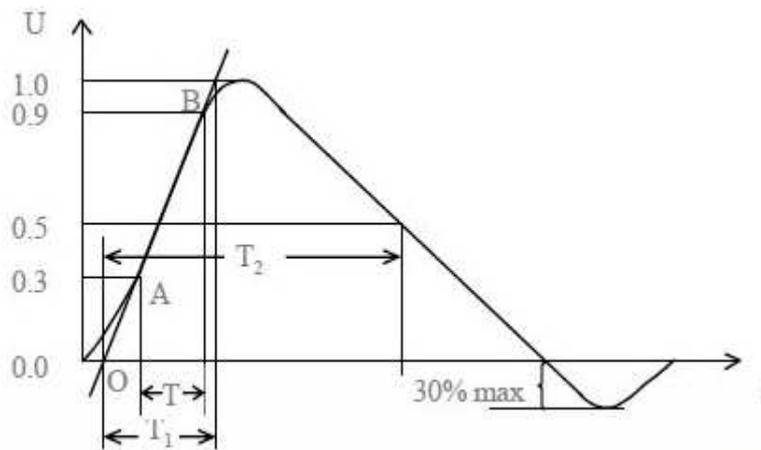
$T_1 = 1.67T = 10\mu s \pm 20\%$

$T_2 = 700\mu s \pm 20\%$

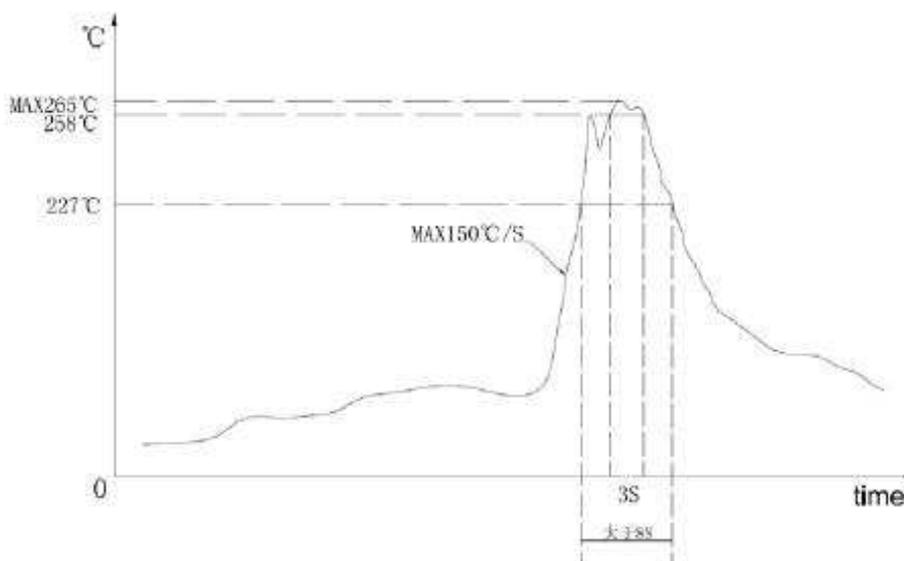
10/1000us, Test Wave

$T_1 = 1.67T = 10\mu s \pm 20\%$

$T_2 = 1000\mu s \pm 20\%$



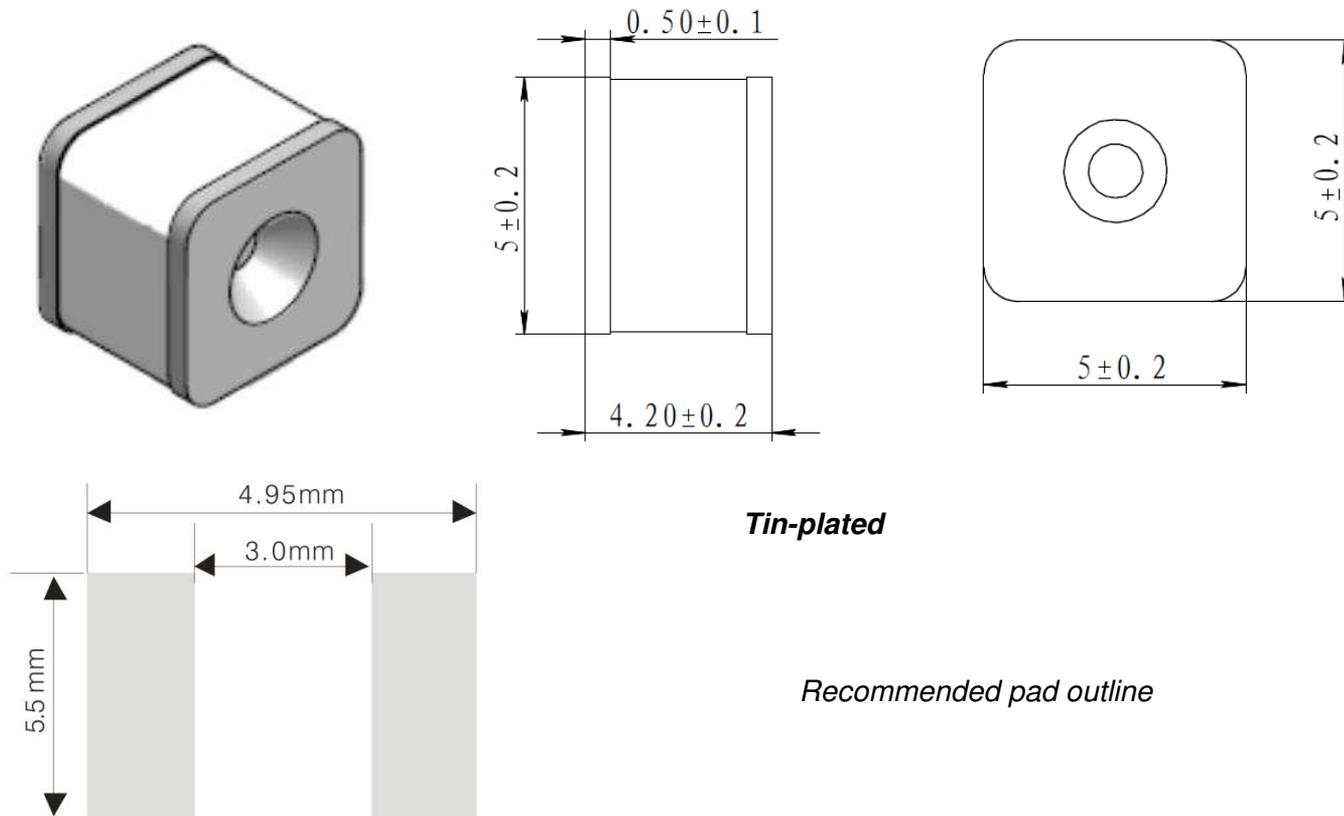
Recommended wave soldering profile



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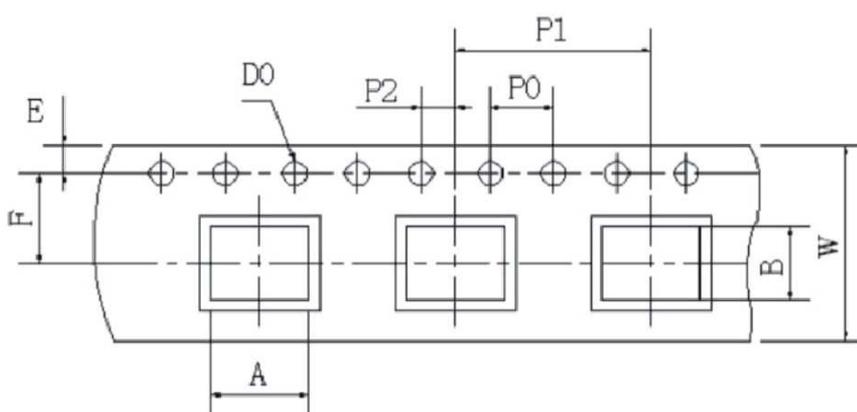
DG2R090M

- 1) Sampling size in accordance to AQL(C=0)
 - 2) DC spark-over voltage $\pm 30\%$ after load
 - 3) Tests according to ITU-T Rec. K. 12 and IEC61643-1
- Dimensions



Package

1000pcs/one reel



| Item | DIM (mm) |
|------|--------------|
| A | 5.3 ± 0.10 |
| B | 4.5 ± 0.20 |
| D0 | φ1.50 ± 0.10 |
| E | 1.75 ± 0.10 |
| F | 5.5 ± 0.1 |
| P0 | 4.0 ± 0.1 |
| P1 | 8.0 ± 0.10 |
| P2 | 2.0 ± 0.1 |
| W | 12.0 ± 0.30 |

Cautions and warnings

- Surge arresters must not be operated directly in power supply networks
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- If the contacts of the surge arrester are defective, current stress can lead to the formation of sparks and loud noises.
- Surge arresters may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.

DC Elec.

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Please read Cautions and warnings and important notes at the end of this document.