

## **Surge arrester**

2-Electrode arrester

**Series/Type: DG2R090L**

**Customer:**

**Version/Date: Issue 03/2015-07-19**

**Surge arrester**

**2-Electrode arrester**

**DG2R090L**

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

**Electrical specifications**

DC breakdown voltage <sup>2) 3)</sup> —Circuit current less than 2mA	90 ±25	V %
Impulse breakdown voltage <sup>1)</sup> at 1kv/us -Typical values of distribution	≤ 600	V
Insulation resistance at DC 100V	≥ 1	GΩ
Capacitance at 1MHz <sup>2)</sup>	≤ 1	Pf
Service life <sup>2)</sup>		
10 operations      8/20us	10	KA
1 operation      10/350us	2.5	KA
10 operations      50Hz,1S	10	A
1 operation      50Hz,9 cycles	100	A
500 operations      10/1000us	100	A
Weight	1	g
Storage and operations temperature	-40...+90	°C
Climatic category (GB/T 9043, IEC61643-1)	40/90/21	
Marking,Blue positive	<b>DG2R090L</b>	

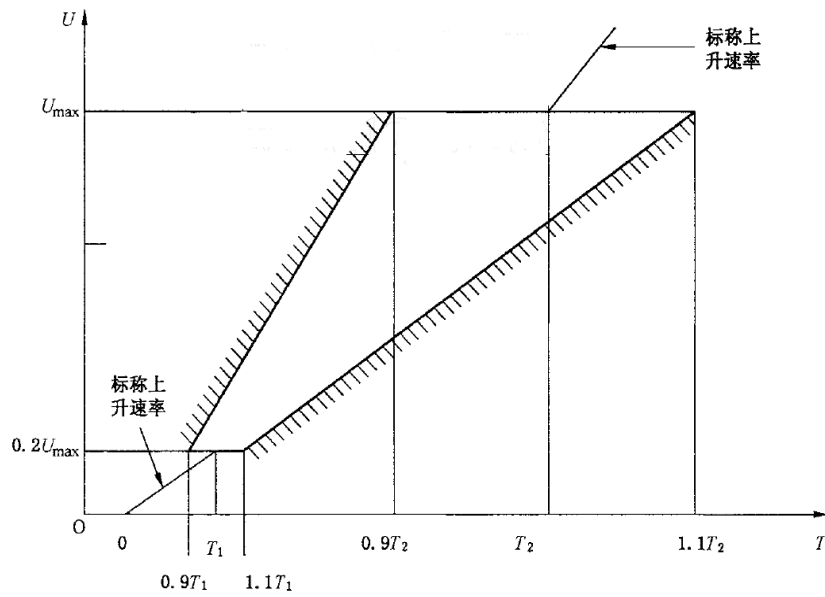


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DC breakdown voltage



8/20us, Test wave

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

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

10/700us, Test Wave

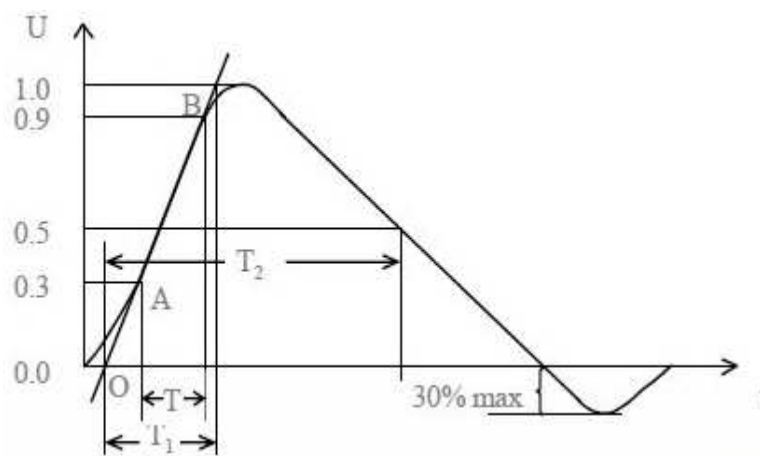
$T_1 = 1.67T = 10\mu s \pm 20\%$

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

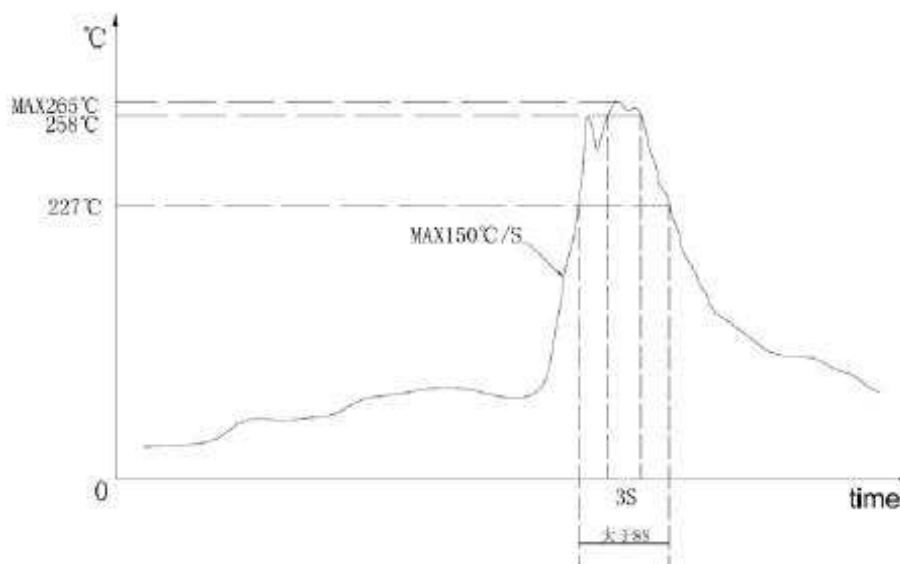
10/1000us, Test Wave

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

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

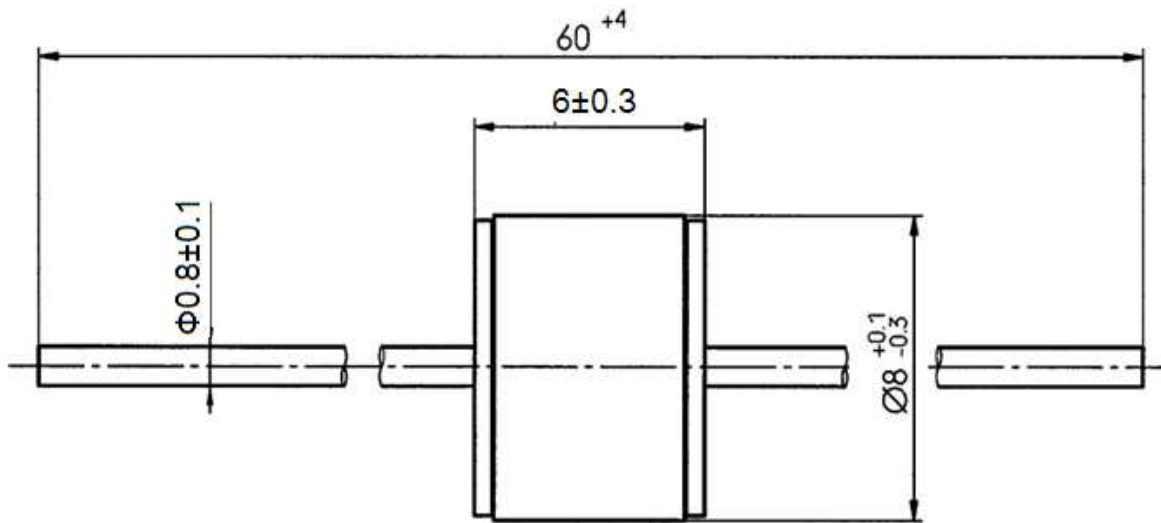


Recommended wave soldering profile



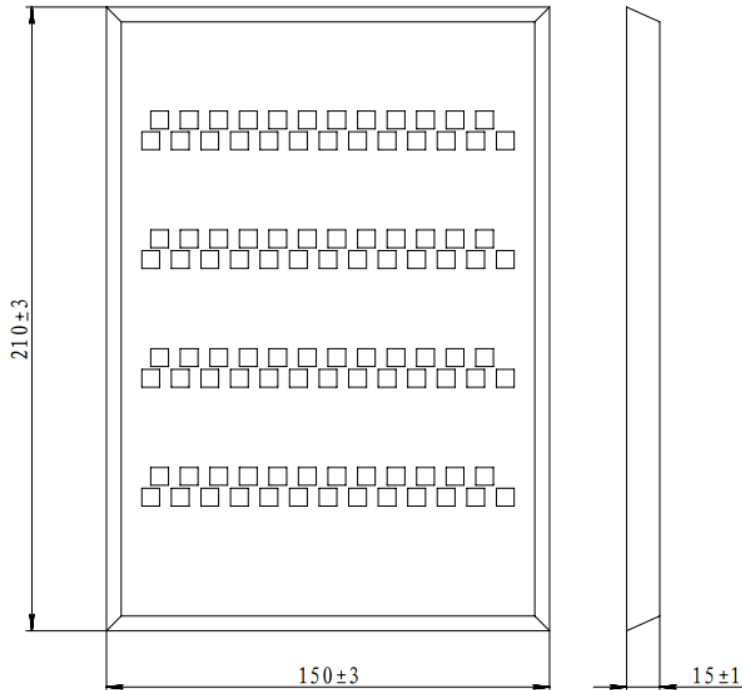
- 1) Sampling size in accordance to AQL(C=0)
- 2) DC spark-over voltage  $\pm 30\%$  after load
- 3) Tests according to ITU-T Rec. K. 12 and IEC61643-1

Dimensions



Wire Tin-plated

Packaging



100pcs/box

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.