

Surge arrester

2-Electrode arrester

Series/Type: DG2R420M

Customer:

Version/Date: Issue 01/2017-04-12

2-Electrode arrester

DG2R420M

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)}	400	V
at 100v/s -Circuit current less than 2mA	±20	%
Impulse breakdown voltage ¹⁾		
at 1kv/us -Typical values of distribution	≤650	V
Insulation resistance at DC 100V	≥1	GΩ
Capacitance at 1MHz ²⁾	≤1	Pf
Service life ²⁾		
10 operations 8/20us	2.5	KA
1 operations 8/20us	5	KA
Weight	~0.4	g
Storage and operations temperature	-40...+90	°C
Climatic category (GB/T 9043, IEC61643-1)	40/90/21	
Marking, Blue positive	2R420	



Tel: +86-510-81707285

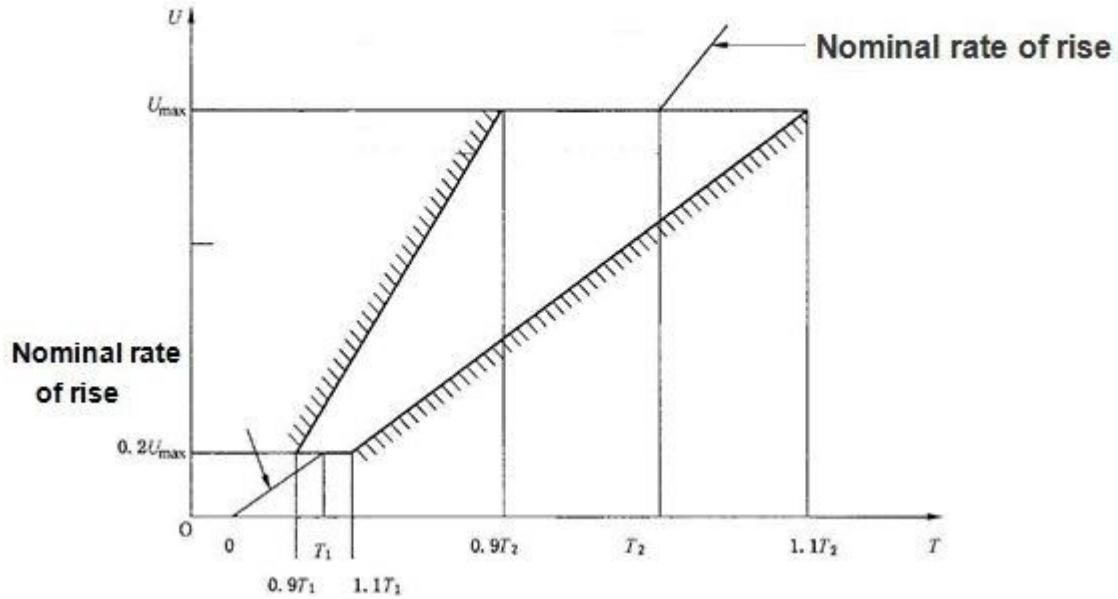
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www.jsdgme.com

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DC breakdown voltage



8/20us, Test wave

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

$$T_2 = 20\mu\text{s} \pm 20\%$$

10/700us, Test Wave

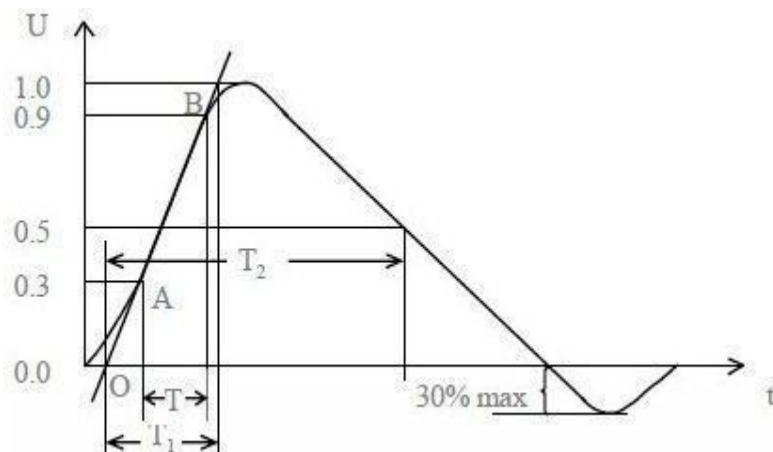
$$T_1 = 1.67T = 10\mu\text{s} \pm 20\%$$

$$T_2 = 700\mu\text{s} \pm 20\%$$

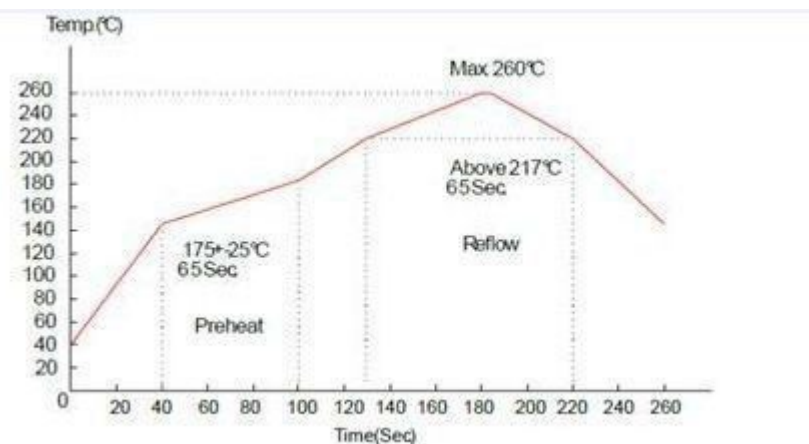
10/1000us, Test Wave

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

$$T_2 = 1000\mu\text{s} \pm 20\%$$



Recommended wave soldering profile

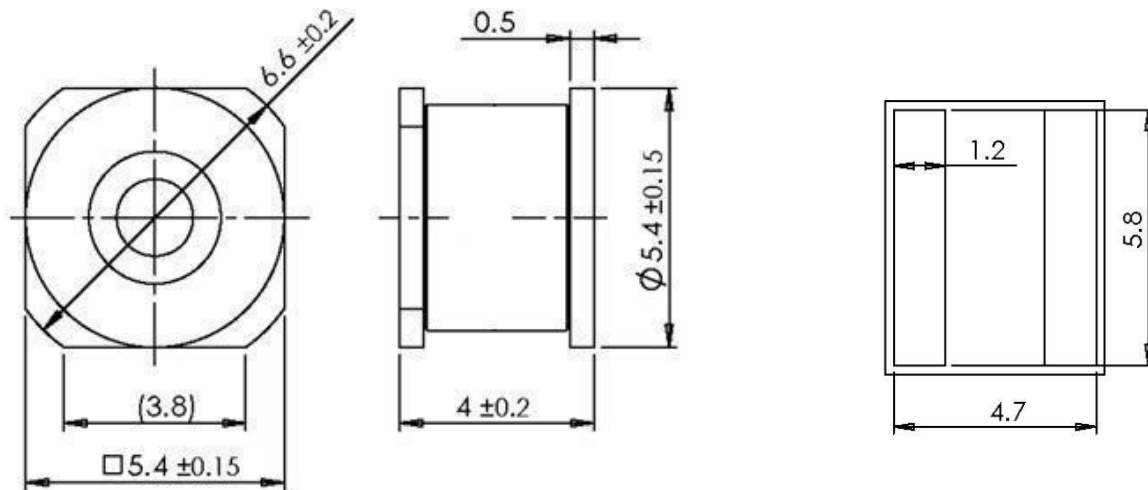


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- 1) Sampling size in accordance to AQL(C=0)
- 2) DC spark-over voltage $\pm 30\%$ after load
- 3) Tests according to ITU-T Rec. K. 12 and IEC61643-1

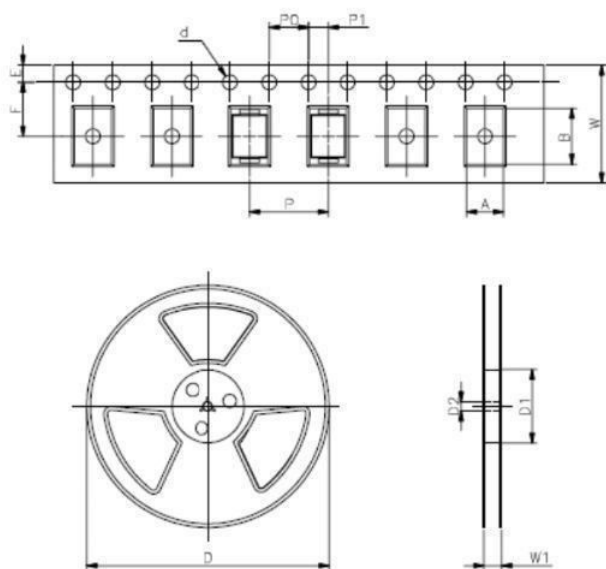
Dimensions



Wire Tin-plated

Packaging

One reel with 800pcs



REF	mm	inch
A	5.3 ± 0.1	0.209 ± 0.004
B	4.5 ± 0.2	0.177 ± 0.008
d	$\phi 1.5 \pm 0.1$	$\phi 0.059 \pm 0.004$
P0	4.0 ± 0.1	0.157 ± 0.004
P1	2.0 ± 0.1	0.079 ± 0.004
P	12.0 ± 0.1	0.472 ± 0.004
E	1.75 ± 0.1	0.069 ± 0.004
F	7.5 ± 0.1	0.295 ± 0.004
W	16.0 ± 0.3	0.630 ± 0.012
D	$\phi 330.0$	$\phi 13.0$
D1	$\phi 50 \text{Min}$	$\phi 1.97 \text{Min}$
D2	$\phi 13 \pm 0.15$	0.512 ± 0.006
W1	16.8 ± 2.0	0.661 ± 0.079

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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