



2R-N series 2-Electrode arrester

Features	Applications
● Extremely small size ● Excellent SMD handling ● Stable performance over life ● Very low capacitance ● High insulation resistance ● Storage and operating temperature -40...+125°C ● RoHS-compatible ● UL-identification ● Extremely fast response time	● Splitter ● PCI Cards ● Morden ● Line cards

Electrical specifications

Part Number	DC spark-over Voltage	Max. Impulse Breakdown Voltage	Discharge Current (8/20us)	AC discharge Current	Impulse Life (10/1000us)	Minimum Insulation Resistance		Max. Capacitance 1MHz
	100V/S	1KV/us	10 times	50Hz, 1S	100A			
	%	V	KA	A	Times	Test Voltage DC(V)	(GΩ)	(Pf)
2R75NL/NM	±30	600	5	5	100	50	1	1
2R90NL/NM	±30	600	5	5	100	50	1	1
2R150NL/NM	±20	600	5	5	100	100	1	1
2R230NL/NM	±20	800	5	5	100	100	1	1
2R300NL/NM	±20	850	5	5	100	100	1	1
2R350NL/NM	±20	950	5	5	100	100	1	1
2R400NL/NM	±20	1000	5	5	100	100	1	1
2R470NL/NM	±20	1100	5	5	100	100	1	1
2R600NL/NM	±20	1200	5	5	100	100	1	1

Part Number Code

J	X	2	R	1	5	0	NL/NM
↓		↓		↓		↓	
JuXing		2R series		DC Voltage			
						N:5.5*6	
						NL:With lead	
						NM:SMD	

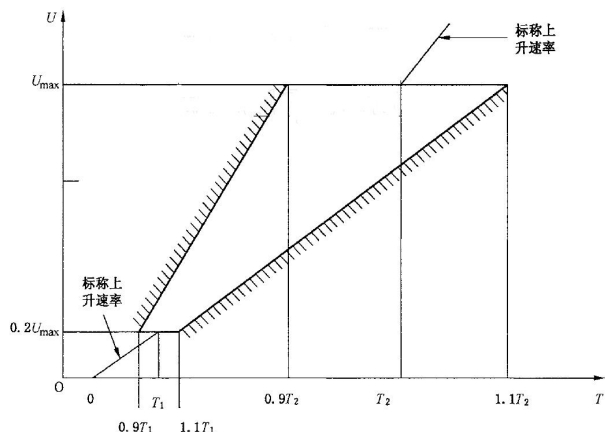
Cautions and warnings

- 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 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

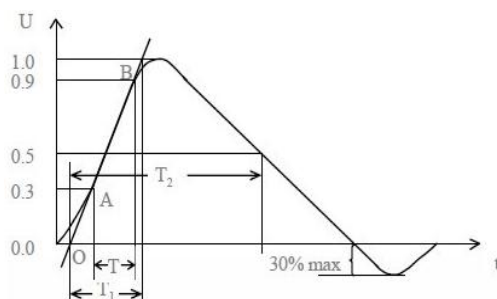
$$T_1 = 1.67T = 10\mu s \pm 20\%$$

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

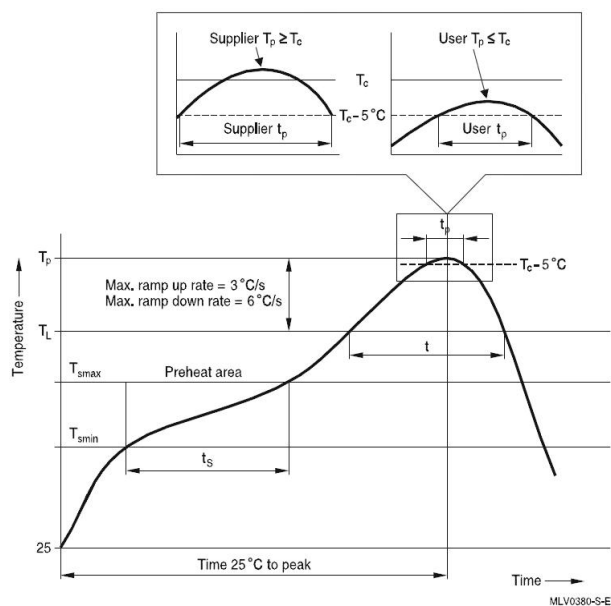
10/1000us, Test Wave

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

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



Recommended wave soldering profile



Reflow profile features		Sn- Pb eutectic assembly	Pb-free assembly
Preheat and soak - Temperature min - Temperature max - Time	T_{smin} T_{smax} t_{smin} to t_{smax}	100 °C 150 °C 60 ... 120 s	150 °C 200 °C 60 ... 180 s
Average ramp-up rate	T_{smax} to T_p	max. 3 °C/ s	max. 3 °C/ s
Liquidous temperature Time at liquidous	T_L t_L	183 °C 60 ... 150 s	217 °C 60 ... 150 s
Peak package body temperature *, Classification temperature **	T_p , T_c	220 ... 235 °C **	245 ... 260 °C **
Time (t_p) ** within 5 °C of the specified classification temperature (T_c)		20 s ***	30 s ***
Average ramp-down rate	T_p to T_{smax}	max. 6 °C/ s	max. 6 °C/ s
Time 25 °C to peak temperature		max. 6 min	max. 8 min

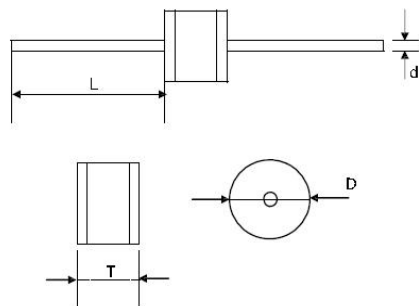
* = Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.
** = For details please refer to JEDEC J-STD-020D.
*** = Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.





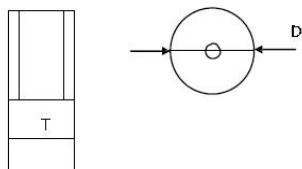
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- 1) Sampling size in accordance to AQL(C=0)
- 2) DC spark-over voltage $\pm 30\%$ after load
- 3) Tests according to ITU-T Rec. K. 12 and IEC61643-1



Unit:mm

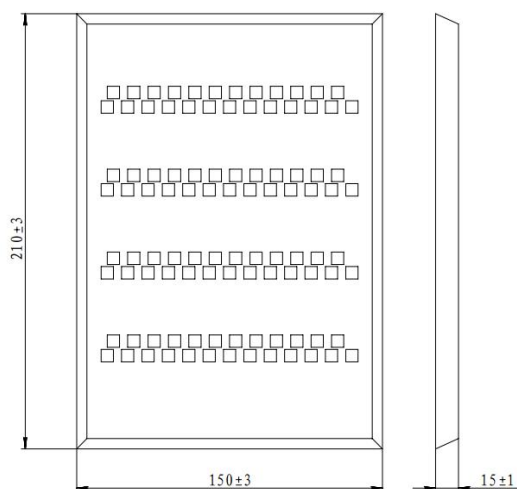
Item	Dimensions	
	Spec.	Tolerance
D	5.5	+0.3/-0.5
T	6.0	+0.3/-0.5
L	20	Min.
d	0.8	± 0.05



Unit:mm

Item	Dimensions	
	Spec.	Tolerance
D	5.5	+0.3/-0.5
T	6.0	+0.3/-0.5

Packaging



100PCS/Box

