

Features

- Extremely small size
- Excellent SMD handing
- 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

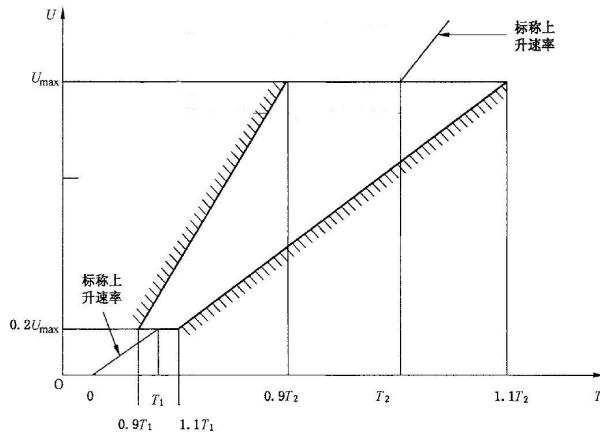
Applications

- Splitter
- PCI Cards
- Modem
- Line cards

Electrical specifications

Part Number	DC spark-over Voltage	Max. Impulse Breakdown Voltage	Discharge Current (8/20us)	AC discharge Current	Impulse Life (10/700us)	Minimum Insulation Resistance		Max. Capacitance 1MHz
	100V/S	1KV/us	10 times	50Hz, 1S	40 Ω			
	%	V	KA	A	KV	Test Voltage DC(V)	(GΩ)	(Pf)
DG2R75C	±30	600	2	1	6	50	1	0.5
DG2R091C	±30	600	2	1	6	50	1	0.5
DG2R151C	±30	600	2	1	6	100	1	0.5
DG2R231C	±20	800	2	1	6	100	1	0.5
DG2R301C	±20	850	2	1	6	100	1	0.5
DG2R351C	±20	950	2	1	6	100	1	0.5
DG2R401C	±20	1000	2	1	6	100	1	0.5
DG2R471C	±20	1100	2	1	6	100	1	0.5
DG2R601C	±20	1300	2	1	6	100	1	0.5

DC breakdown voltage



10/1000us, Test Wave

$T1 = 1.67T = 10\mu s \pm 20\%$

$T2 = 1000\mu s \pm 20\%$

8/20us, Test wave

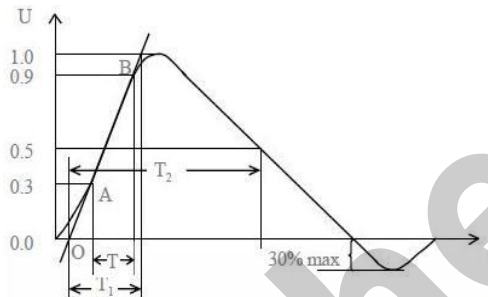
$T1 = 1.25T = 8\mu s \pm 20\%$

$T2 = 20\mu s \pm 20\%$

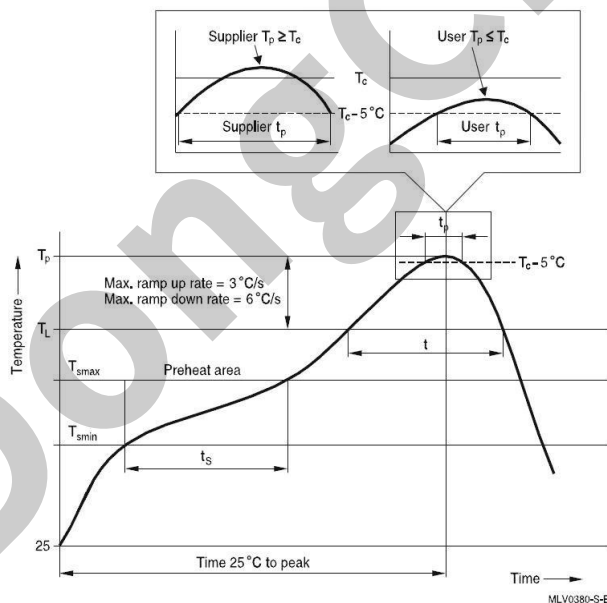
10/700us, Test Wave

$T1 = 1.67T = 10\mu s \pm 20\%$

$T2 = 700\mu s \pm 20\%$



Recommended wave soldering profile



Reflow profile features		Sn- Pb eutectic assembly	Pb-free assembly
Preheat and soak			
- Temperature min	T_{smin}	100 °C	150 °C
- Temperature max	T_{smax}	150 °C	200 °C
- Time	t_{smin} to t_{smax}	60 ... 120 s	60 ... 180 s
Average ramp-up rate	T_{smax} to T_p	max. 3 °C/ s	max. 3 °C/ s
Liquidous temperature	T_L	183 °C	217 °C
Time at liquidous	t_L	60 ... 150 s	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

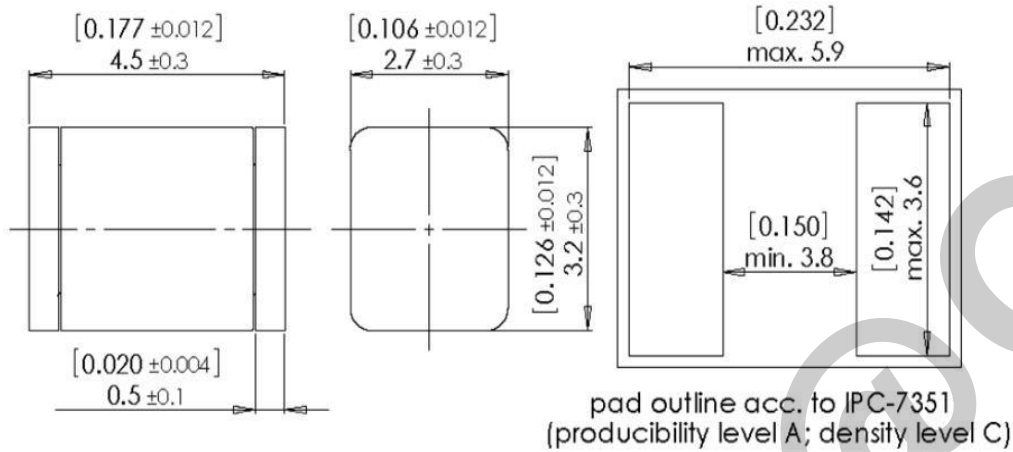
* = Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.

** = For details please refer to JEDEC J-STD-020D.

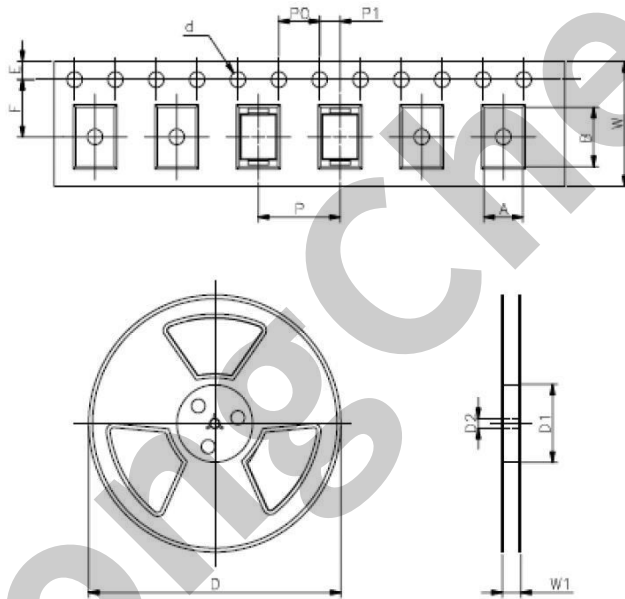
*** = Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

2-Electrode Surge Arrester

- 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 in mm and inch [...]

Packaging

2500pcs/reel



REF	mm
A	3.9 $\pm$ 0.2
B	4.9 $\pm$ 0.2
d	$\Phi 1.5 \pm 0.1$
E	1.75 $\pm$ 0.1
F	5.5 $\pm$ 0.2
P	8 $\pm$ 0.2
P0	4 $\pm$ 0.2
P1	2 $\pm$ 0.2
W	12 $\pm$ 0.3
D	$\Phi 330 \pm 4$
D1	$\Phi 100 \pm 5$
D2	$\Phi 13 \pm 0.2$
W1	16.8 $\pm$ 2

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.

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