

X	2R	****	C
XCH	2-Electrode	DC Spark-over Voltage	4.5mm*3.2mm*2.7mm

Features

- Excellent response to fast rising transients
- Stable breakdown voltage
- Low capacitance and Insertion Loss
- High insulation resistance
- High holdover voltage
- Large absorbing transient current capability

Applications

- Repeaters, Modems
- Telephone Interface, Line cards.
- Data communication equipment
- Line test equipment

Mechanical Data

- Size: 4.5mm*3.2mm*2.7mm
- Surface treatment:Matte-tin plated

Electrical Characteristics

Part Number	DC Spark-over Voltage			Max. Impulse Spark-over Voltage	Discharge Current	Impulse Withstanding Voltage Capacity	Minimum Insulation Resistance		Maximum Capacitance
	100V/s			1KV/us	8/20us 10 times	10/700us 5 time,40Ω	DC Test Voltage		1MHz
	V								
	Min.	Typ.	Max.	V	KA	KV	V	GΩ	pF
X2R75C	53	75	98	600	2	6	50	1	0.5
X2R90C	63	90	120	600	2	6	50	1	0.5
X2R150C	120	150	180	600	2	6	50	1	0.5
X2R200C	160	200	240	600	2	6	100	1	0.5
X2R230C	184	230	276	700	2	6	100	1	0.5
X2R300C	240	300	360	850	2	6	100	1	0.5
X2R350C	280	350	420	950	2	6	100	1	0.5
X2R400C	320	400	480	1000	2	6	100	1	0.5
X2R450C	360	450	540	1100	2	6	100	1	0.5
X2R470C	376	470	564	1100	2	6	100	1	0.5
X2R600C	480	600	720	1300	2	6	100	1	0.5
X2R800C	640	800	960	1600	2	6	100	1	0.5
X2R1000C	800	1000	1200	2000	2	6	100	1	0.5

Parameter	Conditions	Value	Unit
Arc Voltage	at 1.0A	10	V
Operation and storage temperature		-40 ~ 125	°C

Test Wave

8/20us, Test wave

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

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

10/700us, Test Wave

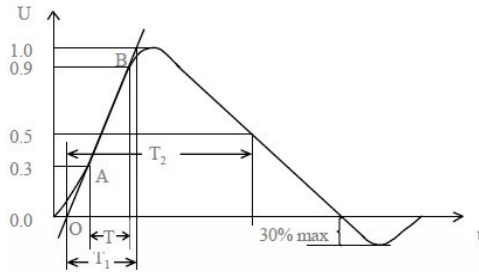
$$T1=1.67T=10\mu s \pm 20\%$$

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

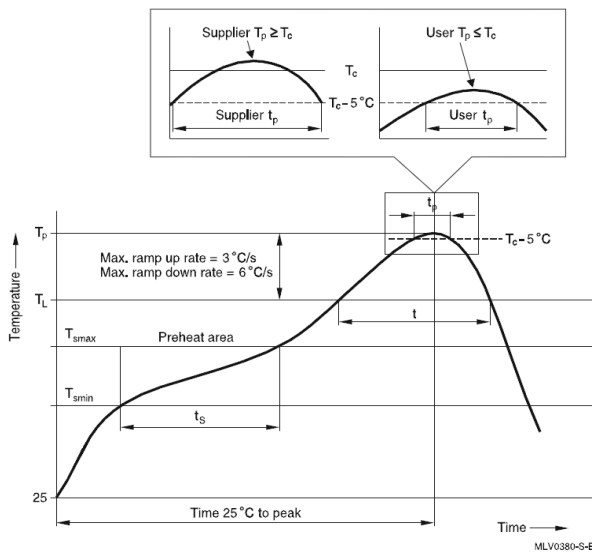
10/1000us, Test Wave

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

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



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.

Device Dimensions

Dimensions are in millimeters

