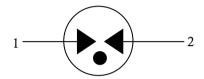


# TG4532D091CX

2-Electrode Surge arrester

Features	Applications
<ul> <li>Extremely small size</li> </ul>	Line Cards
<ul> <li>Extremely fast response time</li> </ul>	PCI Cards
Stable performance over life	Modem
<ul> <li>Very low capacitance</li> </ul>	Splitter
High insulation resistance	
RoHS-compatible	

## **Schematic Symbol**

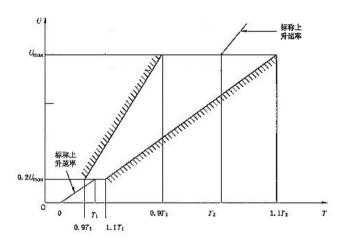


## **Electrical specifications**

Electrical specifications		
DC breakdown voltage 1)2)	90	V
Tolerance	±30	%
Impulse breakdown voltage		
at 1kv/µs —For 99% measure values	≤600	V
Service life		
10 operations 10/700us	4	KV
10 operations 8/20us	2	KA
Insulation resistance at DC 50V	≥1	GΩ
Capacitance at 1MHz	≤1.0	pF
Weight	~0.2	g
Storage and operations temperature	-40+90	°C
Climatic category (IEC60068-1)	40/125/21	
Marking,Blue positive	Without	
	•	



## DC breakdown voltage



8/20us, Test wave

T1=1.25T=8us±20%

T2=20us±20%

10/700us, Test Wave

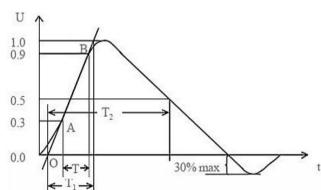
T1=1.67T=10us±20%

T2=700us±20%

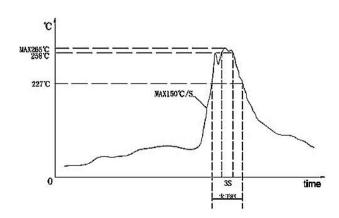
10/1000us, Test Wave

T1=1.67T=10us±20%

T2=1000us±20%

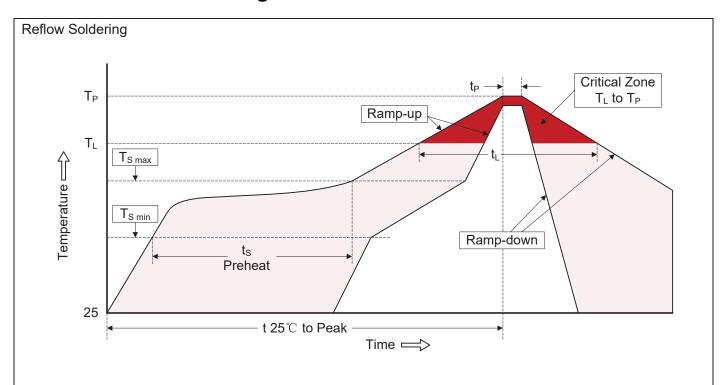


## Recommended wave slodering profile





# **Recommended Soldering Conditions**



#### **Recommended Conditions**

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T <sub>L</sub> to T <sub>P</sub> )	3°C/second max.
Preheat	
-Temperature Min (T <sub>S min</sub> )	150°C
-Temperature Max (T <sub>S max</sub> )	200°C
-Time (min to max) (ts)	60-180 seconds
T <sub>S max</sub> to T <sub>L</sub>	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
-Temperature (T <sub>L</sub> )	217°C
-Time (t <sub>∟</sub> )	60-150 seconds
Peak Temperature (T <sub>P</sub> )	260℃
Time within 5°C of actual Peak Temperature (t <sub>P</sub> )	20-40 seconds
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

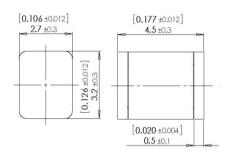


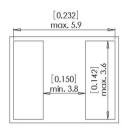
# TG4532D091CX

2-Electrode Surge arrester

- 1) Sampling size in accordance to AQL(C=0)
- 2) In ionized mode
- 3) Tests according to ITU-T Rec. K. 12 IEC61663-2 and IEC61643-311

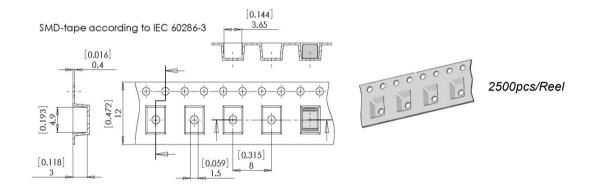
#### **Dimensions**







#### **Packing**



## Cautions and warnings

- Surge arresters must not be operated directly in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- 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.