

Surge arrester

3-electrode arrester

Series/Type: T83-A90X

Ordering code: B88069X8300****

Date: 2019-08-23

Version: 09

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3-electrode arrester T83-A90X

Features

- Standard size
- Fast response time
- Very high current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Telecommunications
- Line protection
- Base station protection

Electrical specifications

	••••			
DC spark-over voltage 1) 2) 3)			90	V
Tolerance			±20	%
Min.			72	V
Max.			108	V
Impulse spark-over vo	oltage 3)			
at 100 V/µs	- for 99% of measure	ed values	< 400	V
	 typical values of distribution 		< 300	V
at 1 kV/µs - for 99% of measu			< 550	V
	- typical values of distribution		< 500	V
Service life				
10 operations		50 Hz; 1 s ⁴⁾	10	Α
1 operation		50 Hz; 0.18 s (9 cycl.) 4)	40	Α
10 operations [5x (+) & 5x (-)]		8/20 μs ⁴⁾	10	kA
1 operation		8/20 μs ⁴⁾	15	kA
1 operation	n	10/350 μs ⁴⁾	2	kA
300 operation	ns [150× (+) & 150× (-)]	10/1000 μs ⁴⁾	200	Α
Insulation resistance at 50 V _{DC} ³⁾			> 10	GΩ
Capacitance at 1 MHz ³⁾			< 1.5	pF
Transverse delay time 5)			< 0.2	μs
Arc voltage at 1 A			~ 15	V
Glow to arc transition current			< 0.5	Α
Glow voltage			~ 70	V
Weight			~ 1.4	g
Operation and storage temperature			-40 +125	°C
Climatic category (IEC 60068-1)			40/125/21	
Marking, red negative			EPCOS 90 YY O 90 - Nominal voltage YY - Year of production O - Non radioactive	
Certifications			UL 497B (E1630)	
Demonstration and an area			<u> </u>	

Remarks on next page

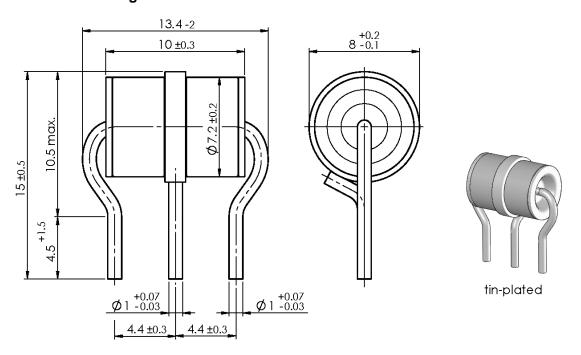


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- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode
- 3) Tip or ring electrode to center electrode
- ⁴⁾ Total current through center electrode, half value through tip respectively ring electrode.
- Test according to ITU-T Rec. K.12

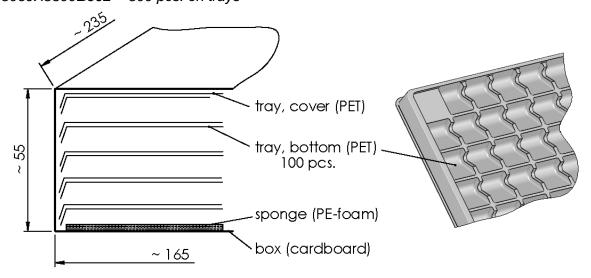
Terms in accordance with ITU-T Rec. K.12 and IEC 61643-311.

Dimensional drawing in mm



Ordering code and packing advice

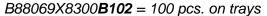
B88069X8300**B502** = 500 pcs. on trays

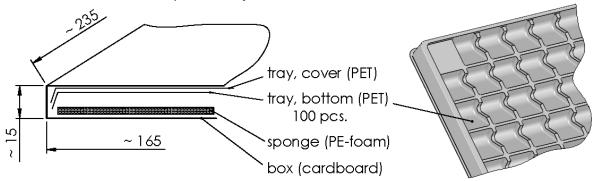


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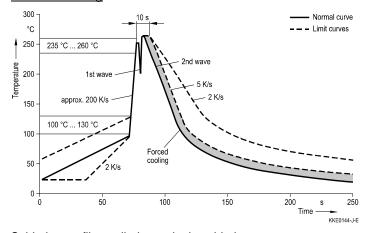
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Soldering parameter

Wave soldering



Wave profile features	Pb-free assembly	
Solder	Sn 95.5 / Ag 3.8 / Cu 0.7	
Solder bath temperature	263 (±3) °C	
Dwell time	<3s	

Soldering profile applied to a single soldering process.

Cautions and warnings

- Do not operate surge arresters in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- Surge arresters may become hot in the event of longer periods of current stress (burn risk). In the event of overload the connectors may fail or the component may be destroyed.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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