Surge arrester

3-electrode arrester

Series/Type:	**T31-A90X**
Ordering code:	**B88069X2261B252**
Date:	2022-02-08
Version:	05

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Surge arrester B88069X2261B252

3-electrode arrester T31-A90X

Features

- Very small size
- Very fast response time
- High current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Modem
- Data lines

Electrical specifications

DC spark-over voltage [1) 2) 3)]			90	V
Tolerance			±20	%
Min.			72	V
Max.			108	V
Impulse spark-over voltage [3)]				
at 100 V/µs	- for 99% of measured values		< 450	V
	- typical values of distribution		< 300	V
at 1 kV/µs	- for 99% of measured values		< 500	V
	- typical values of distribution		< 380	V
Service life				
10 operations		50 Hz; 1 s [4)]	10	A
1 operation		50 Hz; 0.18 s (9 cycl.) [4)]	30	A
10 operations [5× (+) & 5× (–)]		8/20 µs [4)]	10	kA
1 operation		8/20 µs [4)]	12	kA
2 operations		10/350 µs [4)]	5	kA
2 operations		10/350 µs (a-c)	1.5	kA
2 operations		10/350 µs (b-c)	1.5	kA
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	A
Glow voltage			~ 60	V
Weight			~ 1.4	g
Operation and storage temperature			–40 ... +125	°C
Climatic category (IEC 60068-1)			40/125/21	

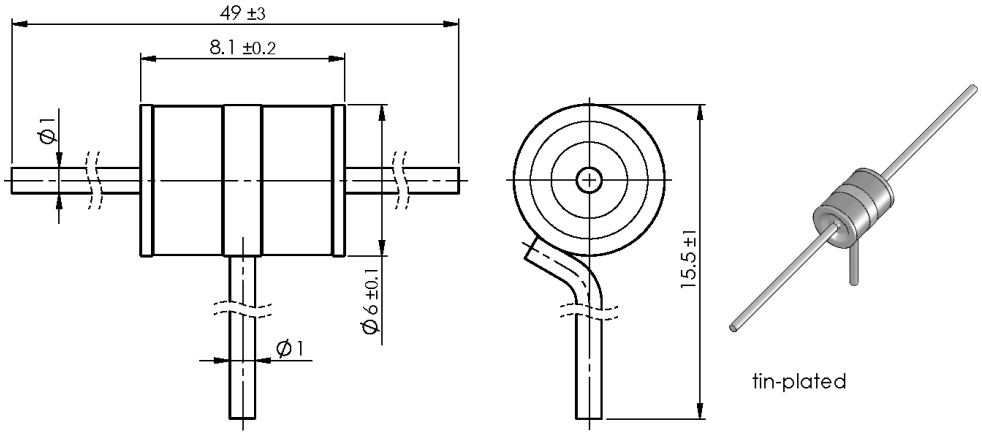
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Marking, blue negative	**EPCOS** **90 YY O** 90 - Nominal voltage YY - Year of production O - Non radioactive
Certifications	UL 497B (E163070)

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.
5) Test according to ITU-T Rec. K.12

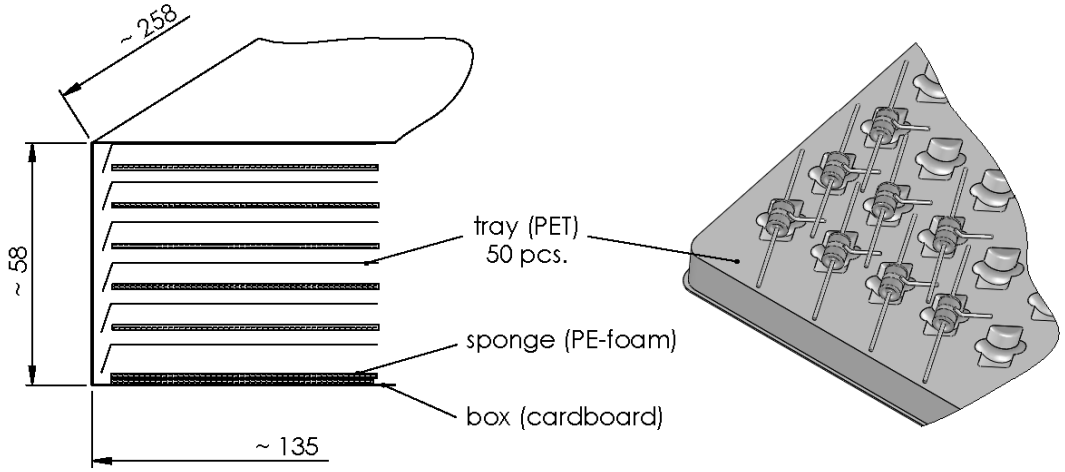
Terms in accordance with ITU-T Rec. K.12; IEC 61663-2 and IEC 61643-311.

Dimensional drawing in mm



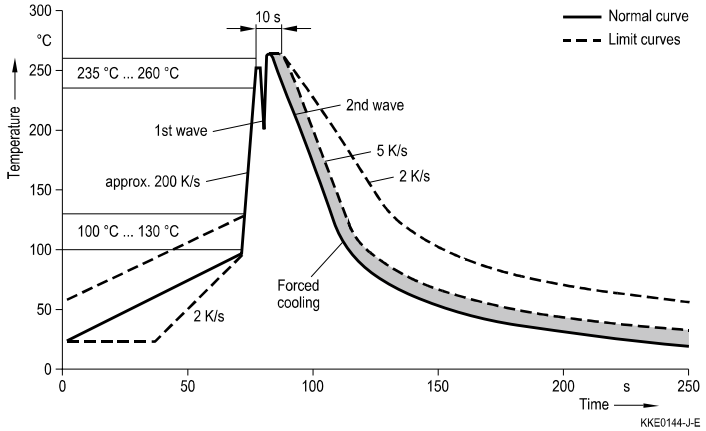
Ordering code and packing advice

*B88069X2261**B252** = 250 pcs. on trays*



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	< 3 s

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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