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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Surge arrester

3-electrode arrester

Series/Type: Ordering code: T23-C600X

B88069X8120B502

2015-06-03 Date:

Version: 04

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Surge arrester B88069X8120B502

3-electrode arrester T23-C600X

#### **Features**

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

# **Applications**

- Base stations
- Line protection
- Station protection

### **Electrical specifications**

DC spark-over voltage 1) 2) 3)		420 700	V
Impulse spark-over voltage 3)			
at 100 V/µs - for 99% of measured values		< 900	V
- typical values of distribution		< 800	V
at 1 kV/µs - for 99% of me	asured values	< 1000	V
- typical values	of distribution	< 950	V
Service life			
10 operations	50 Hz; 1 s <sup>4)</sup>	20	Α
1 operation	50 Hz; 0.18 s (9 cycl.) 4) 5)	130	Α
10 operations [5× (+) & 5× (-)]	8/20 μs <sup>4)</sup>	20	kA
1 operation	8/20 μs <sup>4) 5)</sup>	40	kA
1 operation	10/350 μs <sup>4)</sup>	5	kA
400 operations	10/1000 μs <sup>4)</sup>	1000	A
Insulation resistance at 100 $V_{DC}^{\ 3)}$		> 10	GΩ
Capacitance at 1 MHz <sup>3)</sup>		< 1.5	pF
Transverse delay time <sup>6)</sup>		< 0.2	μs
Arc voltage at 1 A		~ 20	V
Glow to arc transition current		~ 0.5	Α
Glow voltage		~ 200	V
Weight		~ 2.2	g
Operation and storage temperature		-40 <b>+90</b>	°C
Climatic category (IEC 60068-1)		40/ 90/ 21	
Marking, blue negative		EPCOS 600 YY O 600 - Nominal vo YY - Year of pro O - Non radioa	duction

Remarks on next page

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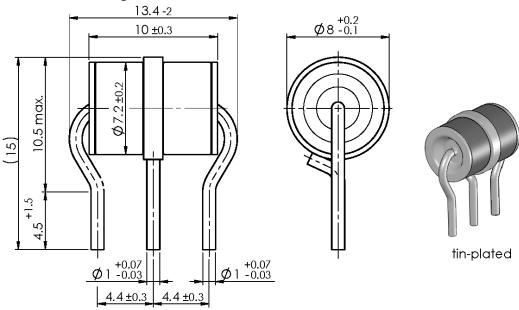
Surge arrester B88069X8120B502

3-electrode arrester T23-C600X

- 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) DC spark-over values may exceed ±30 % after stress, but tubes still operates w/o venting
- Test according to ITU-T Rec. K.12

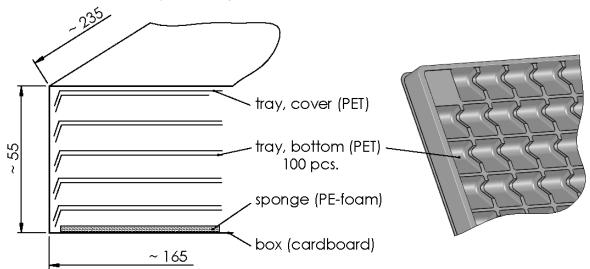
Terms in accordance with ITU-T Rec. K.12; IEC 61663-2 and IEC 61643-311.

## Dimensional drawing in mm



#### Ordering code and packing advice

B88069X8120**B502** = 500 pcs. on trays



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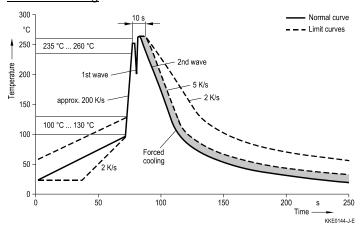


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#### Soldering parameter

#### 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	< 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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