Surge arrester

2-electrode arrester

Series/Type:	**EF2500X**
Ordering code:	**B88069X5690******
Date:	2019-07-15
Version:	07

Surge arrester B88069X5690****

2-electrode arrester EF2500X

Features

- High follow current capability
- Very fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Application with high follow current
- Power supply
- Consumer electronics
- AC power line devices

Electrical specifications

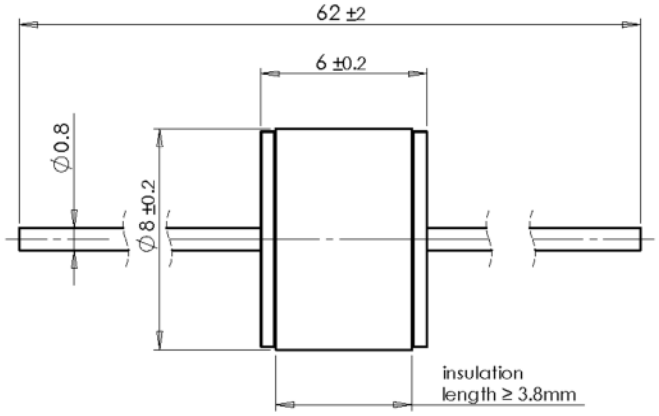
DC spark-over voltage [1) 2)]		2500	V
Tolerance		±20	%
Min.		2000	V
Max.		3000	V
Impulse spark-over voltage			
at 100 V/µs	- for 99% of measured values	< 3200	V
	- typical values of distribution	< 3000	V
at 1 kV/µs	- for 99% of measured values	< 3500	V
	- typical values of distribution	< 3300	V
Service life			
10 operations	50 Hz, 1 s	5	A
1 operation	50 Hz, 0.18 s (9 cycles)	35	A
10 operations [5× (+) & 5× (–)]	8/20 µs	5	kA
1 operation	8/20 µs	10	kA
Max. follow current during one voltage half cycle at 50 Hz [3)]		200	A
Insulation resistance at 100 V_{DC}		> 1	GΩ
Capacitance at 1 MHz		< 1.5	pF
Arc voltage at 1 A		~ 35	V
Glow to arc transition current		< 0.3	A
Glow voltage at 0.1 A		~ 120	V
AC withstand voltage (1 min) [4)]		1250	V
Weight		~ 1.5	g
Operation and storage temperature		–40 ... +125	°C
Climatic category (IEC 60068-1)		40/125/21	
Marking, red positive		**EPCOS EF 2500 YY O** EF - Series 2500 - Nominal voltage YY - Year of production O - Non radioactive	
Certifications		UL 1449 (E319264)	

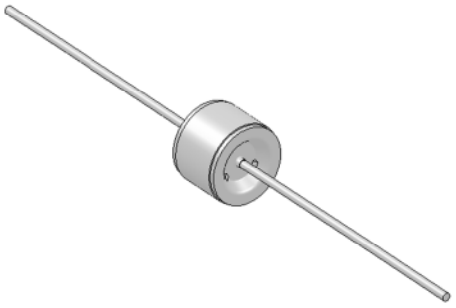
Remarks on next page

1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode
3) Follow current has to be limited by an appropriate varistor in series
4) Test conditions in acc. with MIL-STD-202G at 25 ±5 °C, relative humidity of ≤ 55% and atmospheric pressure 860 ... 1100mbar.

Terms and current waveforms in accordance with: ITU-T Rec. K. 12; IEC 61643-21; 61643-311.

Dimensional drawing in mm

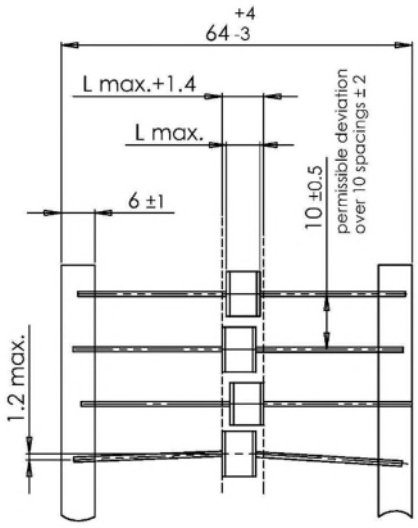




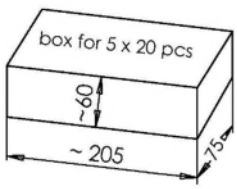
wires tin-plated

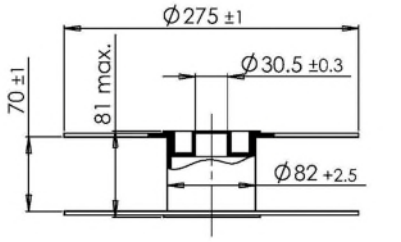
Ordering codes and packing advices

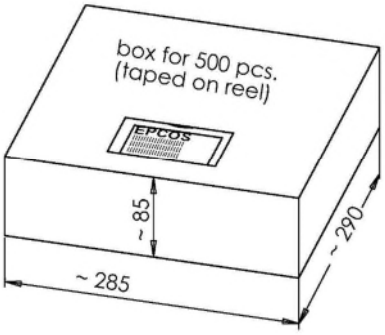
*B88069X5690**S102** = 100 pcs. on 5 taped stripes B88069X5690**T502** = 500 pcs. on tape and reel*



tape acc. to IEC 60286-1

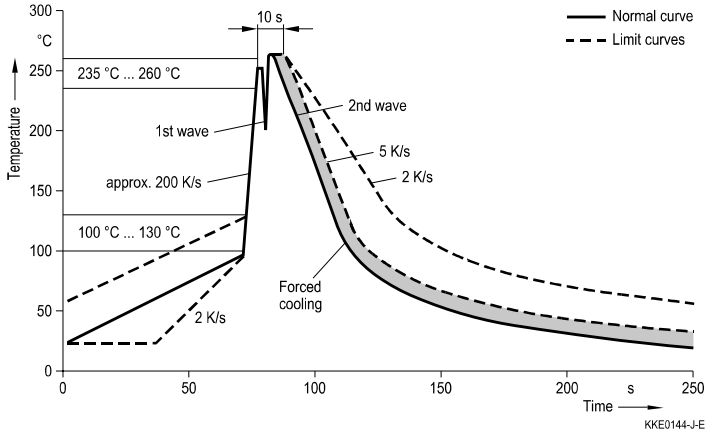






Soldering parameter

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.
- Electromagnetic fields and ionizing radiation may affect the electrical characteristics of the arrester. The impact of such effects (inductive and capacitive field distortion from adjacent components) must be avoided by appropriate circuit design measures.
- 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.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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Release 2018-10

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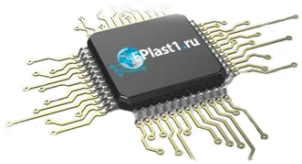

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