



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Surge arrester

2-electrode arrester

Series/Type: EM230X
Ordering code: B88069X0900****
Version/Date: Issue 09 / 2014-10-01

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Features

- Small size
- Fast response time
- High current handling capability
- Stable performance over service life
- Low capacitance and insertion loss
- High insulation resistance
- RoHS-compatible

Applications

- Power supplies
- Antenna protection
- Air condition
- Modem
- Consumer electronics
- Dataline protection

Electrical specifications

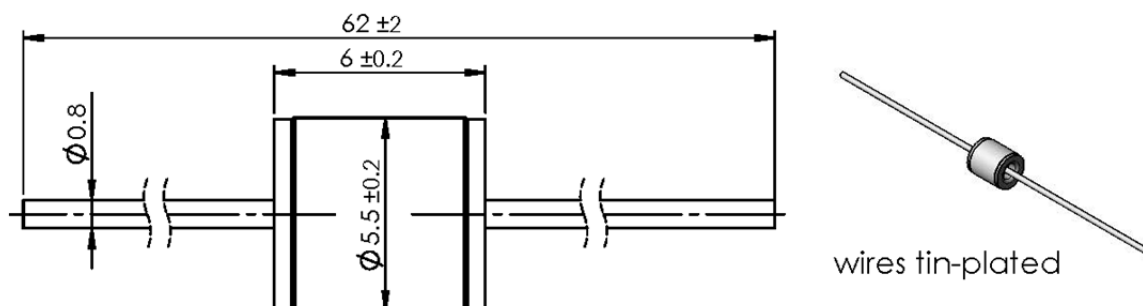
DC spark-over voltage ^{1) 2)}	230	V
Tolerance	±20	%
Min.	184	V
Max.	276	V
Impulse spark-over voltage		
at 100 V/μs - for 99% of measured values	< 600	V
- typical values of distribution	< 550	V
at 1 kV/μs - for 99% of measured values	< 700	V
- typical values of distribution	< 650	V
Service life		
10 operations 50 Hz, 1 s	2.5	A
1 operation 50 Hz, 0.18 s (9 cycles)	5	A
10 operations 8/20 μs	2.5	kA
1 operation 8/20 μs	5	kA
1 operation 10/350 μs	0.5	kA
300 operations 10/1000 μs	100	A
Insulation resistance at 100 V _{DC}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 10	V
Glow to arc transition current	< 0.3	A
Glow voltage	~ 60	V
Weight	~ 1	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, red positive	EPCOS EM 230 YY O EM - Series 230 - Nominal voltage YY - Year of production O - Non radioactive	

¹⁾ At delivery AQL 0.65 level II, DIN ISO 2859

²⁾ In ionized mode

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

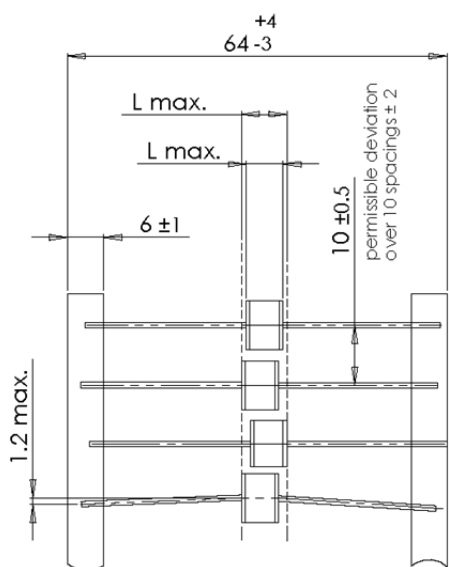
Dimensional drawing in mm



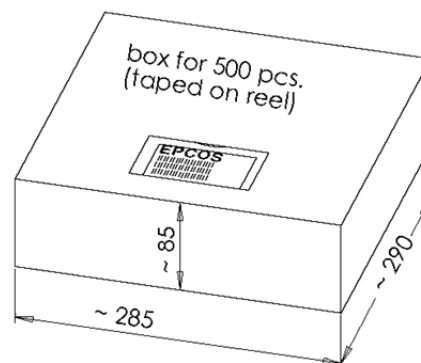
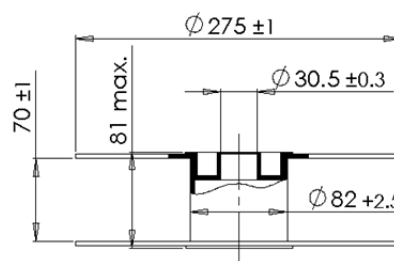
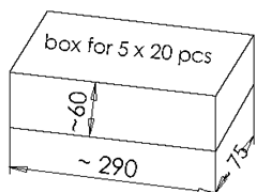
Ordering codes and packing advices

B88069X0900**S102** = 100 pcs. on 5 taped stripes

B88069X0900**T502** = 500 pcs. on tape & reel

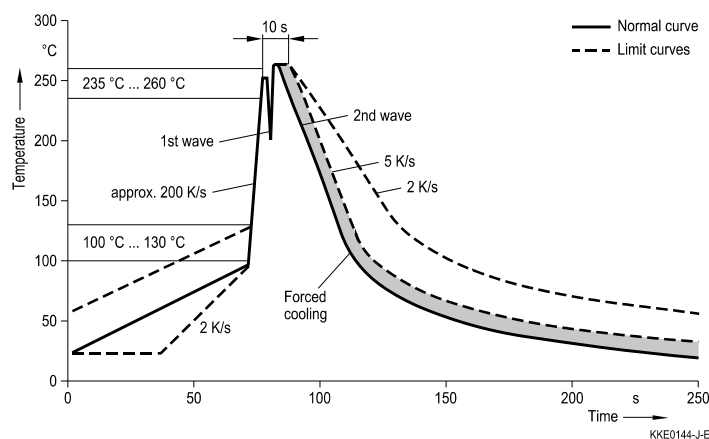


tape acc. to IEC 60286-1



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.
- 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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