# imall

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!



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### Surge arrester

3-electrode arrester

 Series/Type:
 T23-A230XF4

 Ordering code:
 B88069X8750B502

 Version/Date:
 Issue 09 / 2007-10-18

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### Surge arrester

### **3-electrode arrester**

B88069X8750B502

T23-A230XF4

Features	Applications
Standard size	<ul> <li>Branch exchange (MDF)</li> </ul>
<ul> <li>Fast response time</li> </ul>	<ul> <li>Line protection</li> </ul>
<ul> <li>High current rating</li> </ul>	<ul> <li>Station protection</li> </ul>
<ul> <li>Stable performance over life</li> </ul>	
<ul> <li>Very low capacitance</li> </ul>	
<ul> <li>High insulation resistance</li> </ul>	
<ul> <li>Reliable failsafe device</li> </ul>	
<ul> <li>RoHS-compatible</li> </ul>	

### **Electrical specifications**

DC spark-over voltage <sup>1) 2) 4)</sup>		230 ± 20	V %
Impulse spark-over voltage <sup>4)</sup> at 100 V/µs - for 99 % of measured values - typical values of distribution		< 400 < 350	V V
	neasured values s of distribution	< 450 < 400	V V
Service life 10 operations 1 operation 10 operations [5x (+) & 5x (-)] 1 operation 1 operation 300 operations Insulation resistance at 100 V <sub>dc</sub> <sup>4)</sup>	50 Hz, 1 s <sup>5)</sup> 50 Hz, 0.18 s (9 cycles) <sup>5)</sup> 8/20 μs <sup>5)</sup> 8/20 μs <sup>5)</sup> 10/350 μs <sup>5)</sup> 10/1000 μs <sup>5)</sup>	10 50 20 25 5 200 > 10	A A kA kA kA A GΩ
Capacitance at 1 MHz <sup>4)</sup>		< 1.5	pF
Transverse delay time <sup>3)</sup>		< 0.2	μs
Arc voltage at 1 A Glow to arc transition current Glow voltage		~ 35 ~ 1 ~ 200	V A V
Weight		~ 2	g
Storage temperature		-40 +90	°C
Climatic category (IEC 60068-1)		40/ 90/ 21	
Marking, blue negative		EPCOS 230 YY O 230 - Nominal voltage YY - Year of production O - Non radioactive	

KB AB E / KB AB PM

# **⇔TDK**

#### Surge arrester

#### **3-electrode arrester**

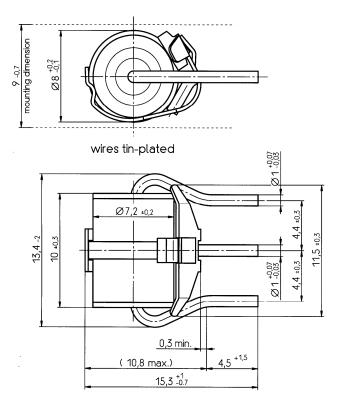
B88069X8750B502 T23-A230XF4

- <sup>a)</sup> xxxx = B102 (100 pcs. on tray) B502 (500 pcs. on tray)
- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- <sup>2)</sup> In ionized mode
- <sup>3)</sup> Test according to ITU-T Rec. K.12
- <sup>4)</sup> Tip or ring electrode to center electrode
- <sup>5)</sup> Total current through center electrode, half value through tip respectively ring electrode.

Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE0845

The arrester failsafe mechanism contains a solder pellet with a melting temperature between 193 and 203 °C.

### Dimensional drawing



Not to scale

Dimensions in mm

Non controlled document

### **Cautions and warnings**

- The short-circuit spring does not trigger until 180 °C is reached depending on the material. Care must be taken to limit the thermal radiation onto adjacent parts to safe values.
- Depending on the incorporation position, the surge arrester may have to be additionally secured by mechanical means.
- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the head
  contacts may fail or the component may be destroyed.
- Damaged surge arresters must not be re-used.
   KB AB E / KB AB PM

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