



## **Switching spark gap**

### **SSG for SMD handling**

**Series/Type:** **CAS02XSMD**

**Ordering code:** **B88069X6321T602**

**Version/Date:** Issue 02 / 2006-10-30

Features	Applications
<ul style="list-style-type: none"> <li>▪ Long life time</li> <li>▪ Stable performance over life</li> <li>▪ Insensitive performance against variations in temperature</li> <li>▪ Low switching losses</li> <li>▪ Very short breakdown time</li> <li>▪ High reliability by robust design</li> <li>▪ SMD handling</li> <li>▪ RoHS-compatible</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ignition for gas stoves</li> </ul>

**Electrical specifications**

DC spark-over voltage <sup>1) 2)</sup>	215 ... 255	V		
Initial values				
Ignition time $t_i$ after 150 hours in darkness <sup>3)</sup>	95 ≤ 4 ≤ 2	99.9 ≤ 5 ≤ 3	100 ≤ 7 ≤ 4	% s s
Electrical life time A				
Maximum increase of DC spark-over voltage	25	V		
Switching operations at +25; 125 °C				
Switching frequency 10 ... 25 Hz	2 000 000	Ignitions		
Switching frequency < 10 Hz	4 000 000	Ignitions		
Test circuit parameters; 1 s ON, 10 s OFF				
Open circuit voltage $V_0$	230	$V_{ac}$		
Loading resistance R	15	$k\Omega$		
Discharge capacitance C	2.2	$\mu F$		
Inductance L	10	$\mu H$		
Discharge peak current $I_P$	~ 300	A		
Electrical life time B				
Switching operations at +25 °C				
Switching frequency 1000 Hz	600 000	Ignitions		
Test circuit parameters; 1 cycle 10 min ON				
Open circuit voltage $V_0$	230	$V_{ac}$		
Loading resistance R	1.5	$k\Omega$		
Discharge capacitance C	0.1	$\mu F$		
Inductance L	7	$\mu H$		
Discharge peak current $I_P$	~ 300	A		
Insulation resistance at 100 V <sub>dc</sub>	> 0.1	$G\Omega$		
Capacitance at 1 MHz	< 2	pF		
Weight	~ 1.5	g		

Operation and storage temperature	-20 ... +150	°C
Climatic category (IEC 60068-1)	20/ 150/ 21	
Marking, red positive	<b>EPCOS CS 230 YYMM O</b> CS - Series 230 - Nominal voltage YY - Year of production MM - Month of production O - Non radioactive	

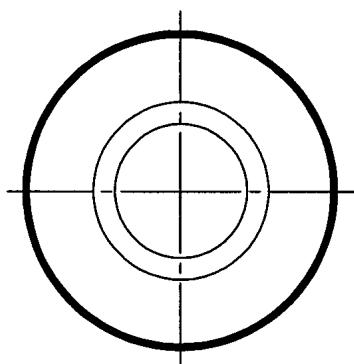
<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

<sup>2)</sup> In ionized mode, after load

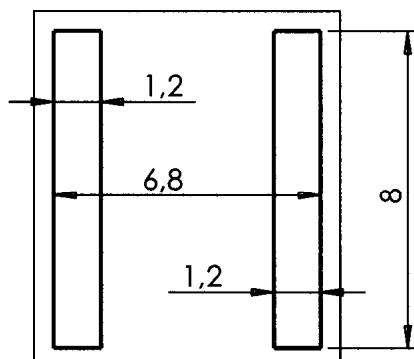
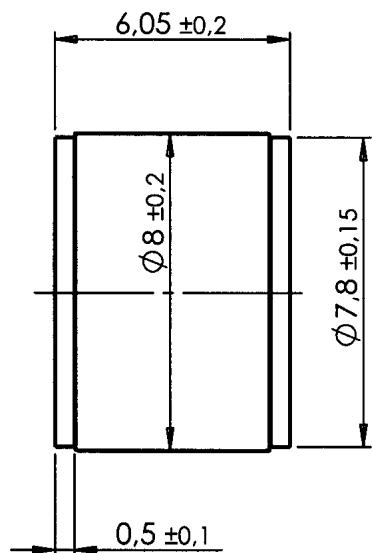
<sup>3)</sup> Time from capacitor charged to the first high voltage spark

Test circuit:  $V_{ac} = 198$  V;  $R = 36$  kΩ;  $C = 2.2$  µF

### Dimensional drawing



tin-plated



recommended pad outline

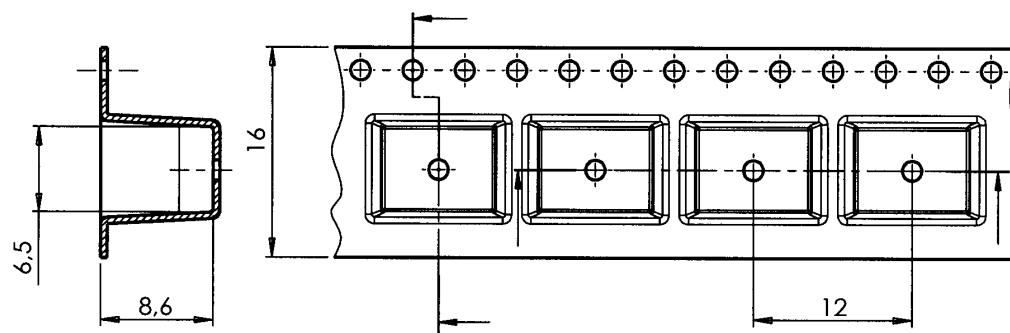
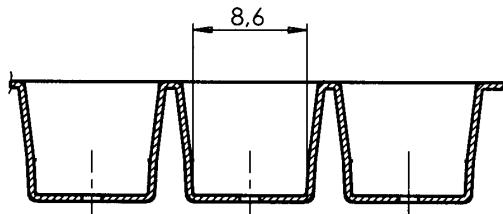
*Not to scale*

*Dimensions in mm*

*Non controlled document*

**Packing advice**

*T602 = SMD-tape with 600 pcs*



SMD-tape according to IEC 60286-3

**Cautions and warnings**

- Switching spark gaps may be used only within their specified values.
- Damaged switching spark gaps must not be re-used.

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