



## Switching spark gap

SSG with lead wires

**Series/Type:** CAS02X-068  
**Ordering code:** B88069X0680T502  
Version/Date: Issue 05 / 2007-11-22

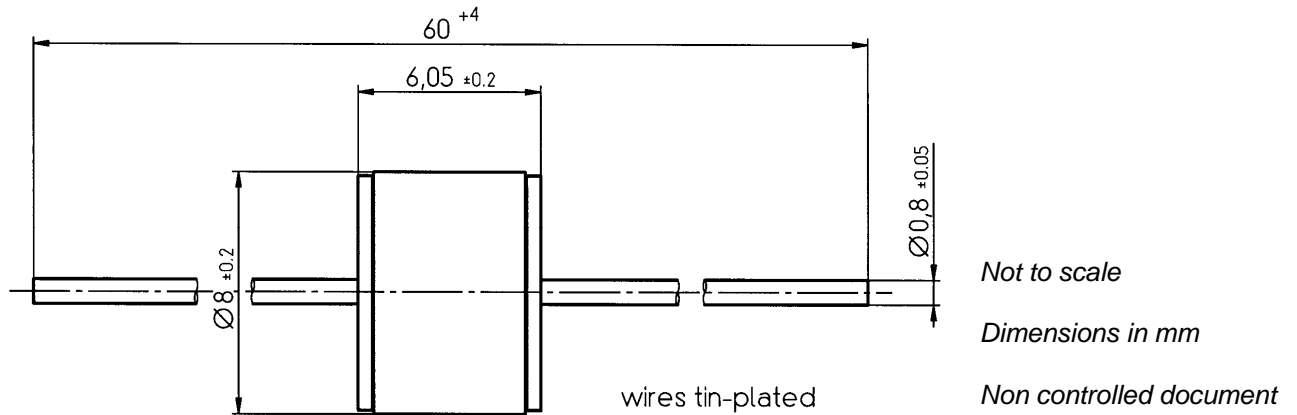
Features	Applications
<ul style="list-style-type: none"> <li>▪ Extremely long life time</li> <li>▪ Stable performance over life</li> <li>▪ Insensitive performance against variations in temperature</li> <li>▪ Low switching losses</li> <li>▪ Very short breakdown time</li> <li>▪ High reliability by robust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

**Electrical specifications**

DC spark-over voltage <sup>1) 2)</sup>	200 ... 255	V
Initial values		
Ignition time $t_i$ after 150 hours in darkness <sup>3)</sup>	95   99.9   100	%
at -20 °C	≤ 4	≤ 5
at +25; 125 °C	≤ 2	≤ 3
		≤ 7
		≤ 4
Electrical life time		
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 < 10Hz	4 000 000	Ignitions
Test circuit parameters		
Open circuit voltage $V_0$	230	$V_{ac}$
Loading resistance R	15	kΩ
Discharge capacitance C	2.2	μF
Inductance L	10	μH
Discharge peak current $I_p$	~ 300	A
Insulation resistance at 100 $V_{dc}$	> 0.1	GΩ
Capacitance at 1 MHz	< 2	pF
Weight	~ 1.5	g
Operation and storage temperature	-20 ... +125	°C
Climatic category (IEC 60068-1)	20/ 125/ 21	
Marking, red positive	<b>EPCOS CS 230 YMM O</b> CS - Series 230 - Nominal voltage YY - Year of production MM - Month of production O - Non radioactive	

- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode, after load
- 3) Time from capacitor charged to the first high voltage spark  
Test circuit:  $V_{ac} = 198 \text{ V}$ ;  $R = 36 \text{ k}\Omega$ ;  $C = 2.2 \text{ }\mu\text{F}$

### Dimensional drawing



### 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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