



## Switching spark gap

SSG with lead wires

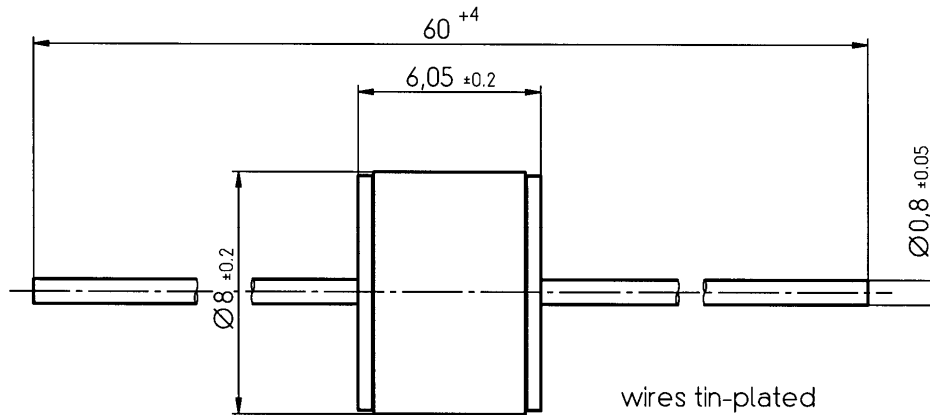
**Series/Type:** CAS02X-068  
**Ordering code:** B88069X0680T502  
Version/Date: Issue 05 / 2007-11-22

| 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       |
| 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><br>CS - Series<br>230 - Nominal voltage<br>YY - Year of production<br>MM - Month of production<br>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**


*Not to scale*

*Dimensions in mm*

*Non controlled document*

**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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