

## Switching Spark Gap

|                       |                        |
|-----------------------|------------------------|
| <b>Series/Type:</b>   | <b>CAS02X-071</b>      |
| <b>Ordering code:</b> | <b>B88069X0710T502</b> |
| <b>Date:</b>          | <b>21.07.2004</b>      |
| <b>Version:</b>       | <b>Issue 09</b>        |

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# Switching Spark Gap

CAS02X-071

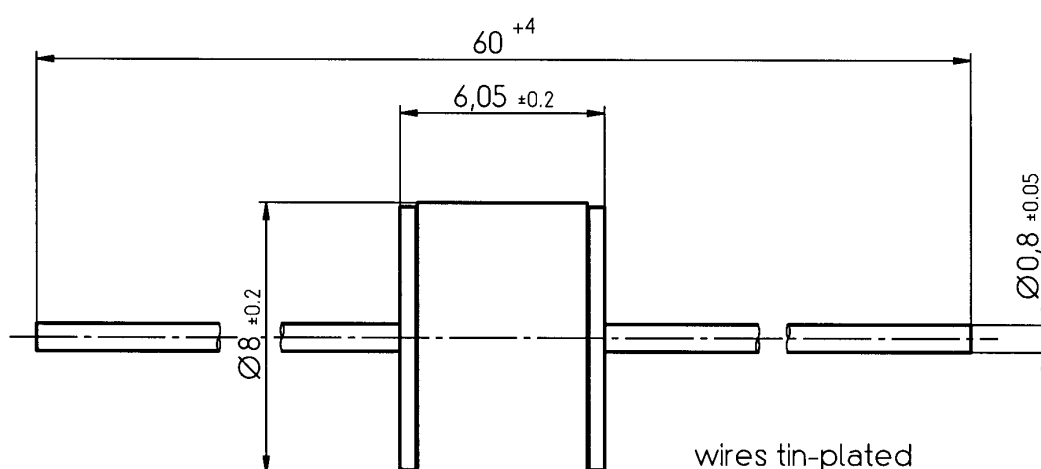
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|   |  |           |
|---|--|-----------|
| DC spark-over voltage <sup>1) 2)</sup>                        | 215 ... 255  | V         |
| Initial values  |  |           |
| Ignition time $t_i$ after 150 hours in darkness <sup>3)</sup> | 95   99.9   100  | %         |
| at -20 °C   | ≤ 4  | ≤ 5       |
| at +25; 125 °C  | ≤ 2  | ≤ 3       |
| 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   | kΩ        |
| Discharge capacitance C                                       | 2.2  | μF        |
| Inductance L  | 10   | μH        |
| 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  | kΩ        |
| Discharge capacitance C                                       | 0.1  | μF        |
| Inductance L  | 7  | 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  | <b>EPCOS CS 230 YYMM O</b><br>CS - Series<br>230 - Nominal voltage<br>YY - Year of production<br>MM - Month of production<br>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



wires tin-plated

*Not to scale*

*Dimensions in mm*

*Non controlled document*

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