

Switching spark gap

SSG with lead wires

FS08X-1GB

Series/Type: Ordering code: B88069X3930T103

Version/Date: Issue 05 / 2008-06-20



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| Features | Applications |
|---|---|
| Extremely long life time | Ignition of HID lamps |
| Stable performance over life | |
| Insensitive performance against variations in temperature | |
| Low switching losses | |
| Very short breakdown time | |
| High reliability by robust design | |
| RoHS compatible | |

Electrical specifications

| Nominal breakdown voltage V _N | 800 | V |
|--|---|---|
| Initial values ²⁾ Static breakdown voltage V _S ¹⁾ First ignition value V _{S, FTE} after 24 hours in darkness Following ignition values V _{S, FIV} | ≤ 950 704 896 | V |
| Electrical life time $^{3)}$ Breakdown voltage V_B First ignition value $V_{B,FTE}$ after 24 hours in darkness Ignition time t_I at V_0 during life Following ignition values $V_{B,FIV}$ | ≤ 1000 ≤ 60 680 920 | V ms V |
| Switching operations in total at 1 st - 40 °C 2 nd + 25 °C 3 rd + 125 °C | 100 000 10 000 40 000 50 000 | Ignitions Ignitions Ignitions Ignitions |
| Test circuit parameters Open circuit voltage V_0 Loading resistance R Discharge capacitance C in parallel 2 $M\Omega$ Inductance L Discharge peak current I_P ; 6 half cycles, 800 V | 1030 44 150 2 230 | V kΩ nF μH A |
| General technical data Insulation resistance at 100 V Early ignition values between 500 680 V Breakdown time Maximum switching frequency Maximum loading current Weight | > 100 ≤ 1 ≤ 50 400 50 ~ 2 | MΩ % ns Hz mA g |
| Marking, blue positive | EPCOS 800 WWY O 800 - Nominal voltage WW - Calendar week of production Y - Year of production O - Non radioactive | |

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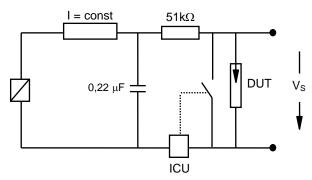
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Figures

Fig. 1: QC- test circuit (100% outgoing inspection)



DUT device under test

ICU ignition control unit (sensitivity 10 ... 30 μA)

Discharge current 10 - 20 mA

Fig. 3: QC- test circuit (sampling inspection at 25 °C)

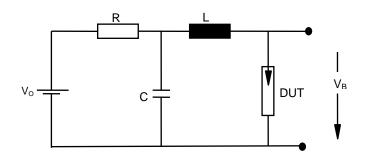


Fig. 2: Explanation of measurands

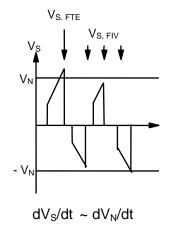
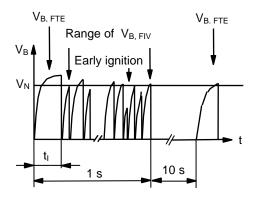


Fig. 4: Explanation of measurands



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¹⁾ At delivery AQL 0,65 level II, DIN ISO 2859

²⁾ Page 2, Fig. 1 and 2

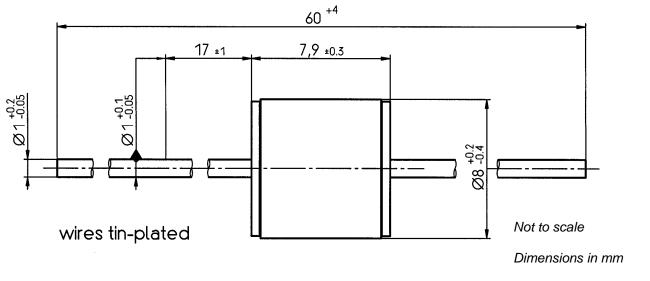
³⁾ Page 2, Fig. 3 and 4



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Dimensional drawing



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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