



Switching spark gap

SSG with lead wires

Series/Type: FS08X-1GB
Ordering code: B88069X3930T103
Version/Date: Issue 05 / 2008-06-20

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

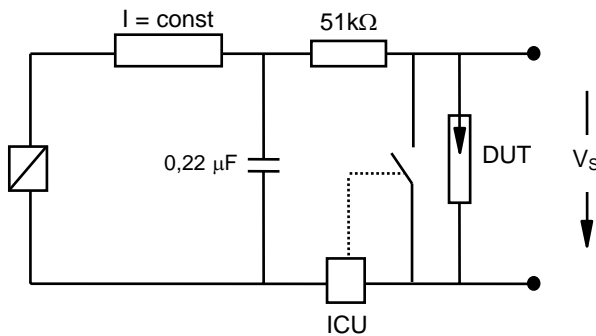
Electrical specifications

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 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 Ω Inductance L Discharge peak current I_P ; 6 half cycles, 800 V	1030 44 150 2 230	V k Ω nF μ H 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	M Ω % 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	

- 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

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. 2: Explanation of measurands

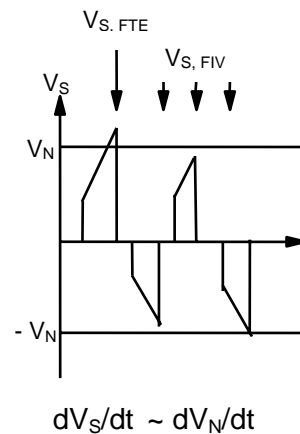


Fig. 3: QC- test circuit (sampling inspection at 25 °C)

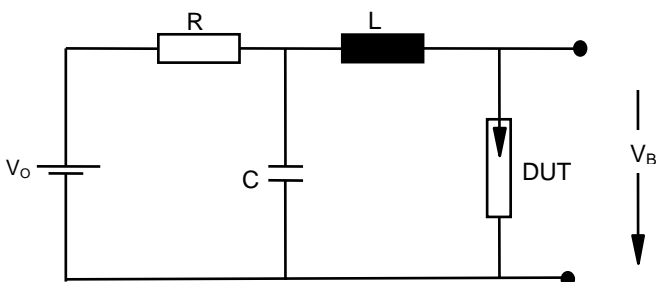
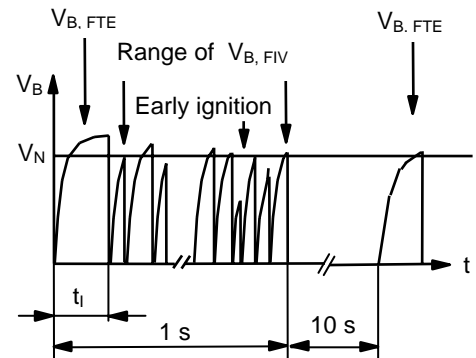
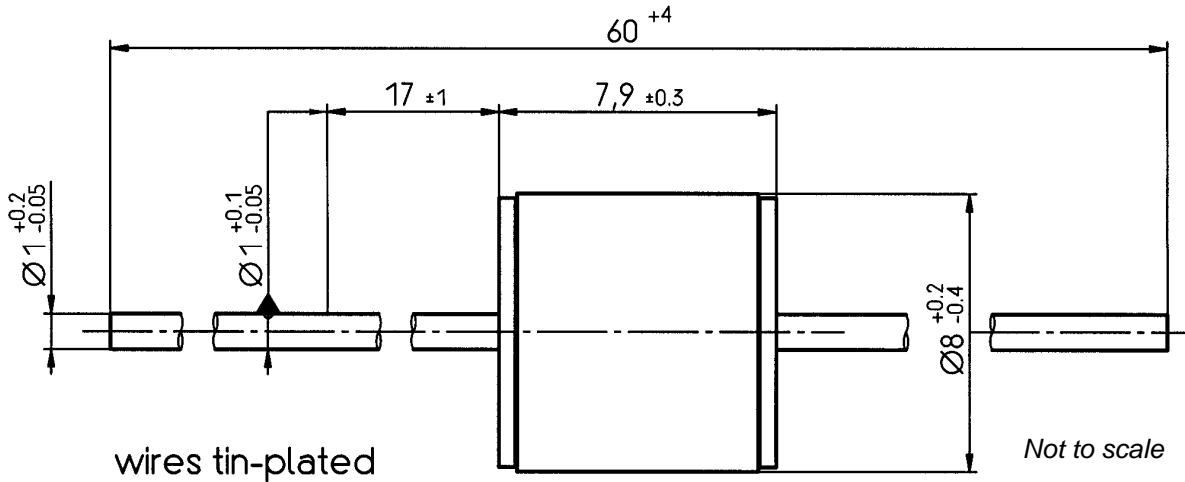


Fig. 4: Explanation of measurands



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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