



Switching spark gap

SSG with lead wires

Series/Type: FS08X-1GB
Ordering code: B88069X3930T103
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Features	Applications
- 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	Ignition of HID lamps

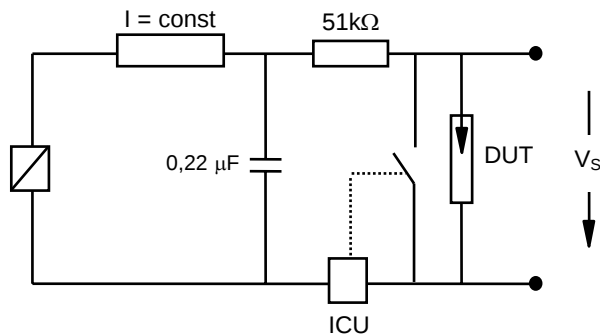
Electrical specifications

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	≤ 950	V
Following ignition values $V_{S, FIV}$	704 ... 896	V
Electrical life time ³⁾		
Breakdown voltage V_B		
First ignition value $V_{B, FTE}$ after 24 hours in darkness	≤ 1000	V
Ignition time t_i at V_0 during life	≤ 60	ms
Following ignition values $V_{B, FIV}$	680 ... 920	V
Switching operations in total	100 000	Ignitions
at 1 st – 40 °C	10 000	Ignitions
2 nd + 25 °C	40 000	Ignitions
3 rd + 125 °C	50 000	Ignitions
Test circuit parameters		
Open circuit voltage V_0	1030	V
Loading resistance R	44	k Ω
Discharge capacitance C in parallel 2 M Ω	150	nF
Inductance L	2	μ H
Discharge peak current I_P ; 6 half cycles, 800 V	230	A
General technical data		
Insulation resistance at 100 V	> 100	M Ω
Early ignition values between 500 ... 680 V	≤ 1	%
Breakdown time	≤ 50	ns
Maximum switching frequency	400	Hz
Maximum loading current	50	mA
Weight	~ 2	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

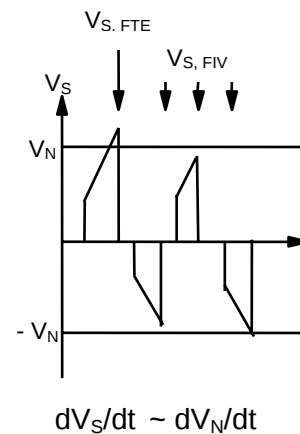


Fig. 3: QC- test circuit (sampling inspection at 25 °C)

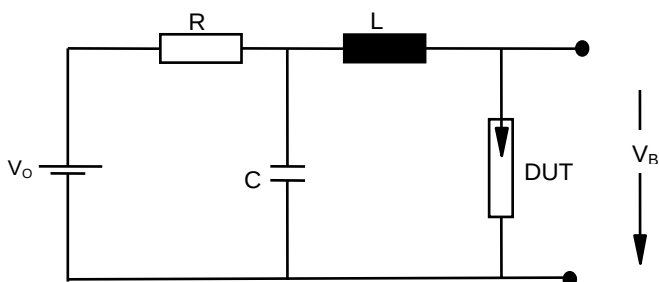
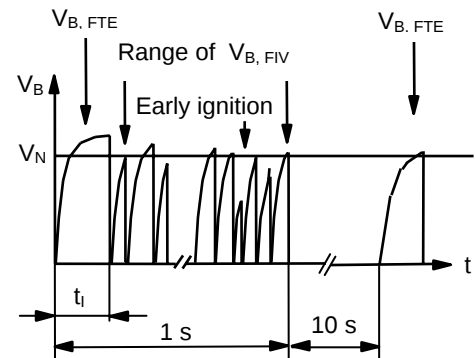
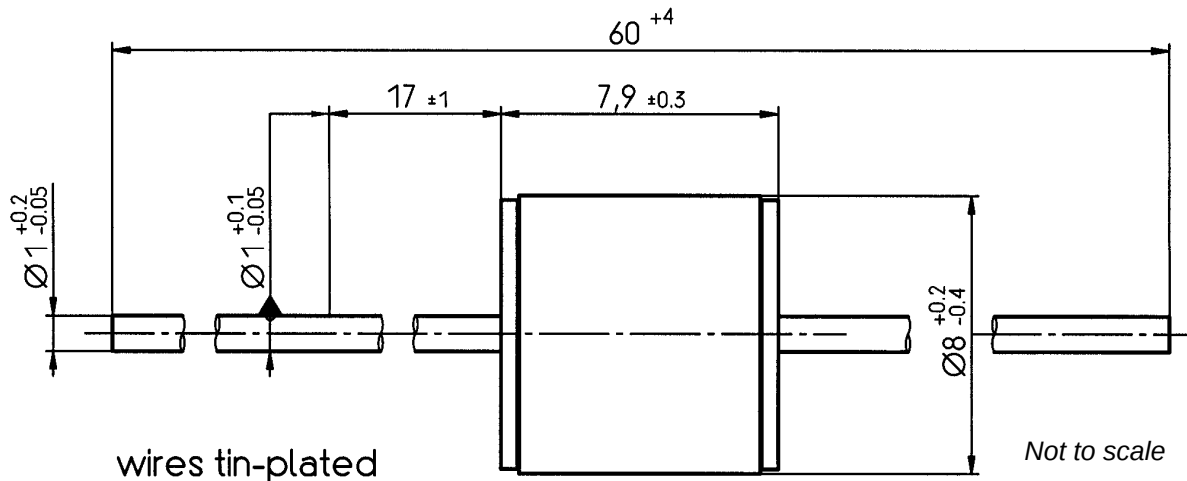


Fig. 4: Explanation of measurands



Dimensional drawing



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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