



Switching spark gap

SSG with lead wires

Series/Type: FS08X-1GH
Ordering code: B88069X0340xxxx ^{a)}
Version/Date: Issue 08 / 2006-08-30

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Features	Applications
<ul style="list-style-type: none"> ▪ Extremely long life time ▪ Stable performance over life ▪ Insensitive performance against variations in temperature ▪ Very low switching losses ▪ Very short breakdown time ▪ High reliability by robust design ▪ RoHS compatibility 	<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	≤ 950	V
Following ignition values $V_{S, FIV}$	704 ... 896	V
Electrical life time ³⁾		
Breakdown voltage V_B up to 100 000 Ignitions		
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 $V_{B, FIV}$ at 50 000 Ignitions	704 ... 920	V
Following ignition values $V_{B, FIV}$	680 ... 920	V
Switching operations in total	100 000	Ignitions
at - 40; +150 °C, each	10 000	Ignitions
at + 25; +125 °C, each	40 000	Ignitions
Test circuit parameters		
Open circuit voltage V_0	1000	V
Loading resistance R	56	k Ω
Discharge capacitance C	114	nF
Inductance L	0.13	μ H
Discharge peak current I_P	~ 660	A
General technical data		
Insulation resistance at 100 V	> 100	M Ω
Early ignition values between 530 ... 680 V	≤ 1	%
Breakdown time	≤ 50	ns
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	

a) xxxx = T502 (taped and reeled with 500 pcs.)
 = T103 (taped and reeled with 1000 pcs.)

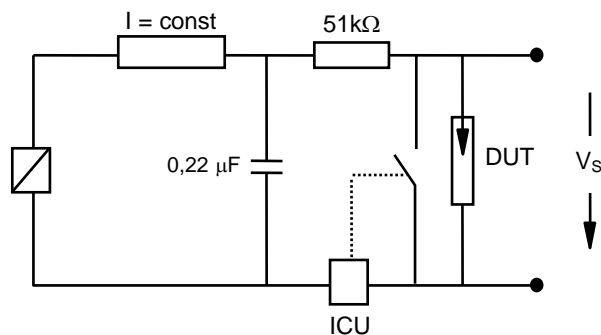
1) At delivery AQL 0,65 level II, DIN ISO 2859

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

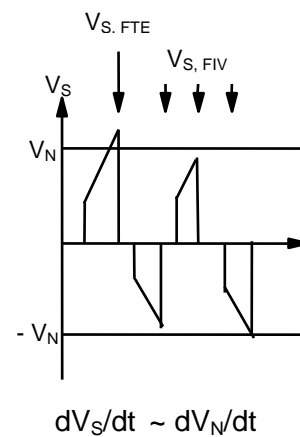


Fig. 3: QC- test circuit (sampling inspection at 25 °C)

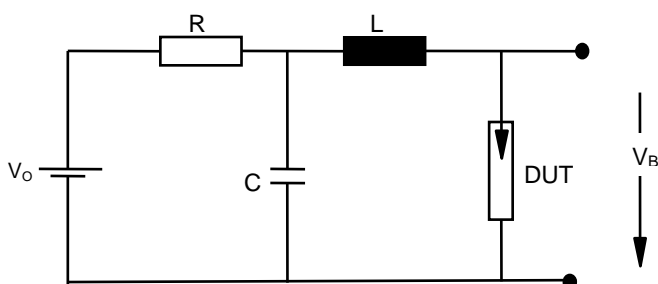
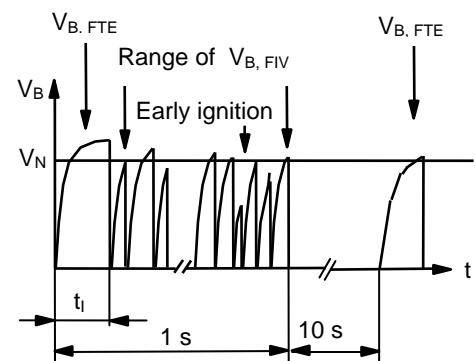
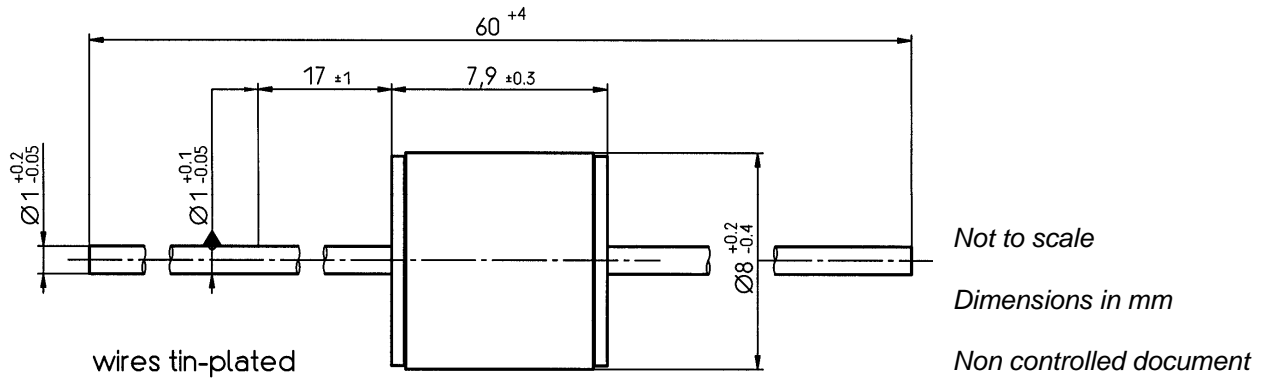


Fig. 4: Explanation of measurands



Dimensional Drawing

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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