



Switching spark gap

SSG with lead wires

Series/Type: FS5,5X-1
Ordering code: B88069X3440S102
Version/Date: Issue 08 / 2013-05-22

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Features

- 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 compatible

Applications

- Ignition circuits
- High voltage switch

Electrical specifications

Nominal breakdown voltage V_N	5000	V
Initial values ²⁾		
Static breakdown voltage V_S ¹⁾		
First ignition value $V_{S, FTE}$ after 24 hours in darkness	≤ 7000	V
Following ignition values $V_{S, FIV}$	4850 ... 6150	V
Electrical life time ³⁾		
Breakdown voltage V_B		
First ignition value $V_{B, FTE}$ after 24 hours in darkness	≤ 7000	V
Following ignition values $V_{B, FIV}$	4000 ... 6600	V
Switching operations at $-40 \dots +125 \text{ }^\circ\text{C}$	500 000	Ignitions
Test circuit parameters		
Open circuit voltage V_0	10000	V
Loading resistance R	4000	k Ω
Discharge capacitance C	1.5	nF
Inductance L	0.5	μH
Discharge peak current I_P	~ 200	A
General technical data		
Insulation resistance at 100 V	> 100	M Ω
Early ignition values between 2000 ... 4000 V	≤ 5	%
Breakdown time	≤ 50	ns
Maximum switching frequency	100	Hz
Weight	~ 2	g
Marking, blue positive	EPCOS 5500 WWY O 5500 - 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⁾ Fig. 1 and 2

³⁾ Fig. 3 and 4

Test circuits

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

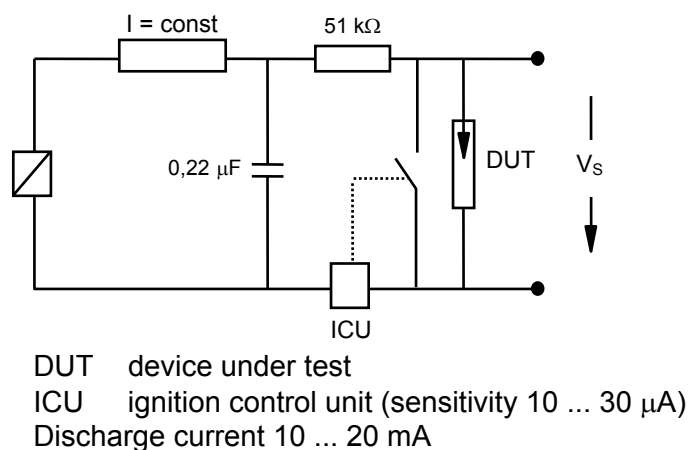


Fig. 2: Explanation of measurands

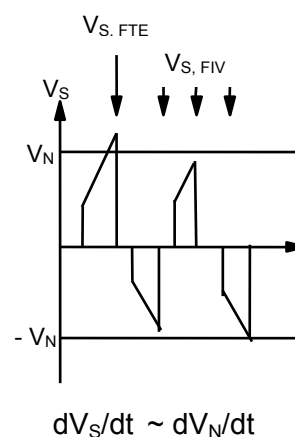


Fig. 3: QC- test circuit (sampling inspection at 25 °C)

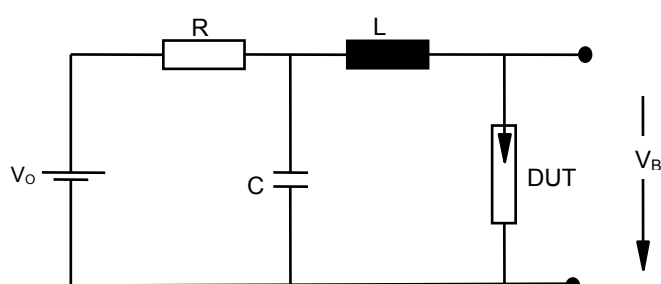
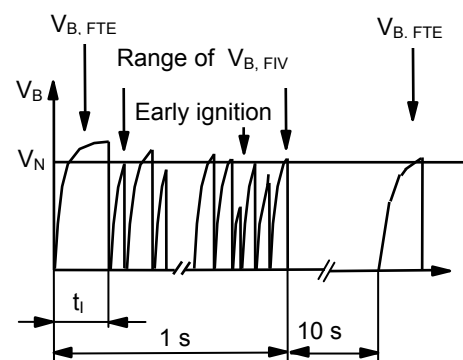
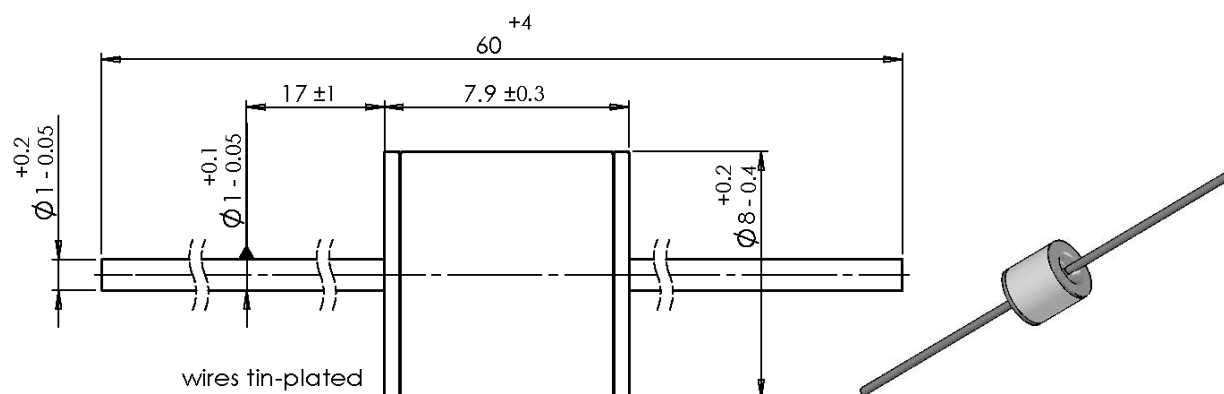


Fig. 4: Explanation of measurands

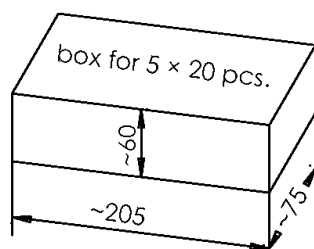
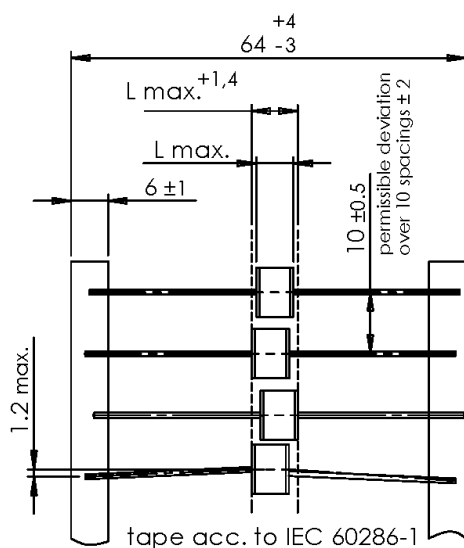


Dimensional drawing in mm



Ordering code and packing advice

B88069X...S102 = 100 pcs. on 5 taped stripes



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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