



Switching spark gap

SSG with lead wires

Series/Type: FS1.8X-1
Ordering code: B88069X6721xxxx ^{a)}
Version/Date: Issue 01 / 2007-04-18

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Features	Applications
- 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	- Ignition circuits - High voltage switch

Electrical specifications

Nominal breakdown voltage V_N	1850	V
Initial values ²⁾		
Static breakdown voltage V_S ¹⁾		
First ignition value $V_{S, FTE}$ after 24 hours in darkness	≤ 2400	V
Following ignition values $V_{S, FIV}$	1440 ... 2160	V
Electrical life time ³⁾		
Breakdown voltage V_B		
First ignition value $V_{B, FTE}$ after 24 hours in darkness	≤ 2700	V
Following ignition values $V_{B, FIV}$	1350 ... 2250	V
Switching operations at 0° C ... 100 °C	200 000	Ignitions
Test circuit parameters		
Open circuit voltage V_0	2700	V
Loading resistance R	34	kΩ
Discharge capacitance C	800	nF
Inductance L	15.5	μH
General technical data		
Insulation resistance at 100 V	> 100	MΩ
Early ignition values between 1000 ... 1440 V	≤ 1	%
Breakdown time	≤ 50	ns
Maximum switching frequency	100	Hz
Maximum loading current	50	mA
Weight	~ 2	g
Marking, blue positive	EPCOS 1800 YY O 1800 - Nominal voltage YY - Year of production O - Non radioactive	

^{a)} xxxx = S102 (100 pcs on 5 taped stripes)
= T502 (500 pcs on tape and reel)

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)

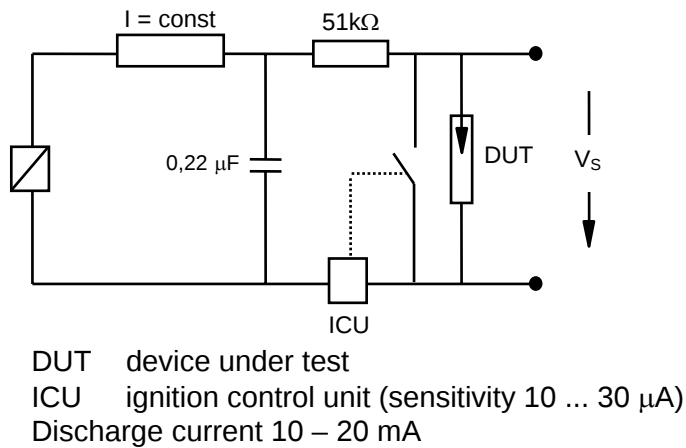


Fig. 2: Explanation of measurands

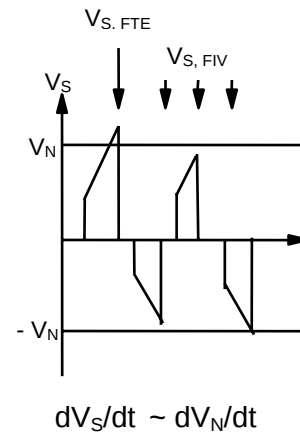


Fig. 3: QC- test circuit (sampling inspection at 25 °C)

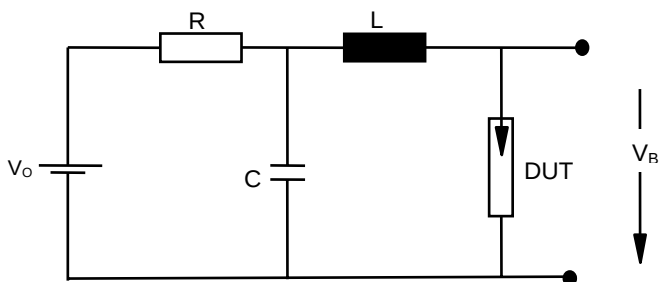
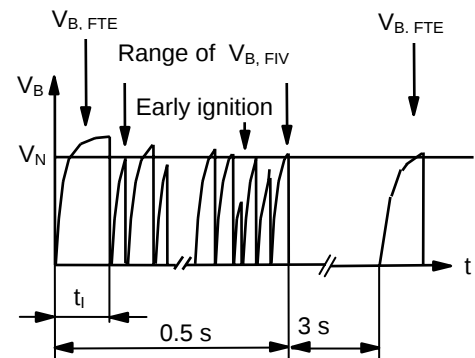
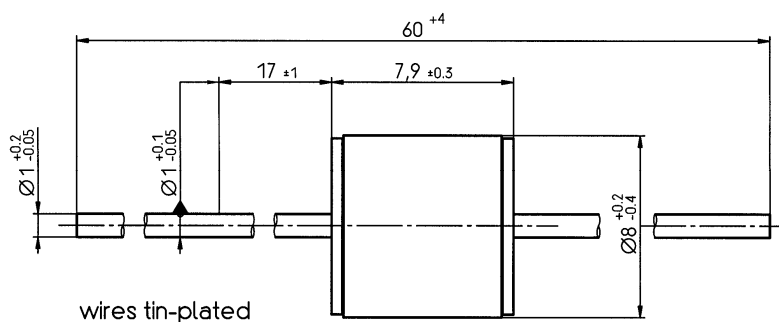


Fig. 4: Explanation of measurands



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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