



Switching spark gap

SSG with lead wires

Series/Type: SSG03X-1J
Ordering code: B88069X6331****
Version/Date: Issue 02 / 2009-10-20

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

Application

- Ignition of HID lamps

Electrical specifications

Nominal breakdown voltage V_N	350	V
Initial values ^{1) 2)}		
Static breakdown voltage V_S		
First ignition value $V_{S, FTE}$ after 24 hours in darkness	≤ 420	V
Following ignition values $V_{S, FIV}$	290 ... 390	V
Electrical life time ³⁾		
Breakdown voltage V_B		
First ignition value $V_{B, FTE}$ after 24 hours in darkness	≤ 450	V
Ignition time t_i at V_0 during life	≤ 300	ms
Following ignition values $V_{B, FIV}$	290 ... 390	V
Switching operations at + 25 °C	50 000	Ignitions
Test circuit parameters		
Open circuit voltage V_0	450	V
Loading resistance R	10	k Ω
Discharge capacitance C	680	nF
Inductance L	0.5	μ H
Discharge peak current I_P	~ 500	A
General technical data		
Insulation resistance at 100 V	> 100	M Ω
Early ignition values below 290 V	≤ 2	%
Breakdown time	≤ 50	ns
Maximum switching frequency	200	Hz
Maximum loading current	50	mA
Weight	~ 2	g
Marking, red positive	EPCOS 350 WWY O 350 - Nominal voltage WW - Calendar week of production Y - Year of production O - Non radioactive	

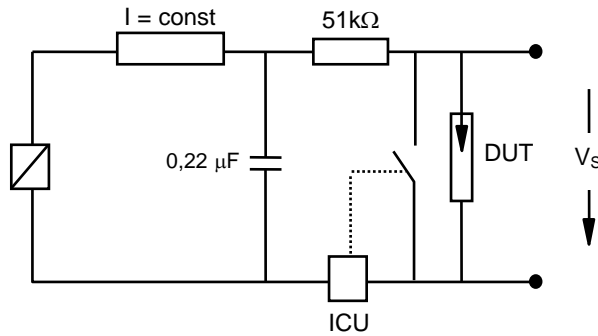
¹⁾ At delivery AQL 0,65 level II, DIN ISO 2859

²⁾ Fig. 1 and 2

³⁾ Fig. 3 and 4

Test circuits and explanations

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

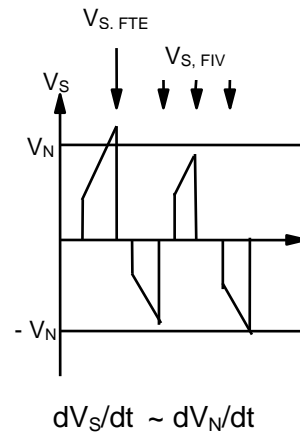


Fig. 3: QC-test circuit (sampling inspection at 25 °C)

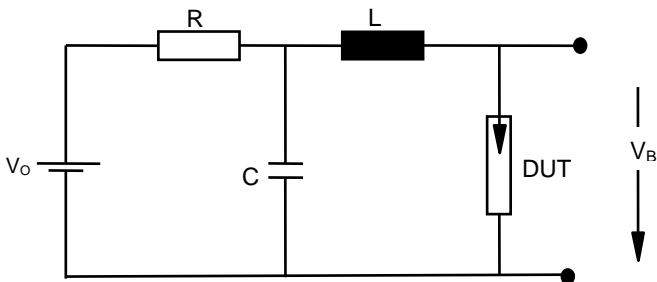
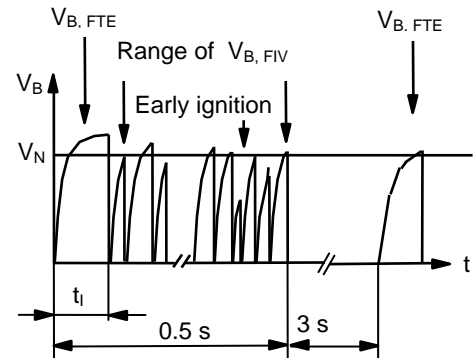
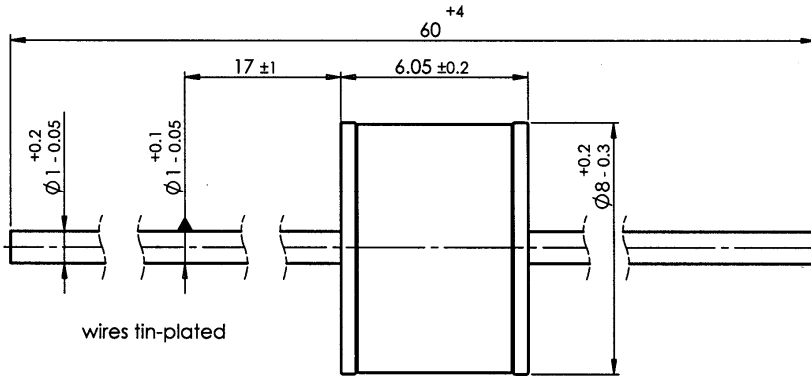


Fig. 4: Explanation of measurands

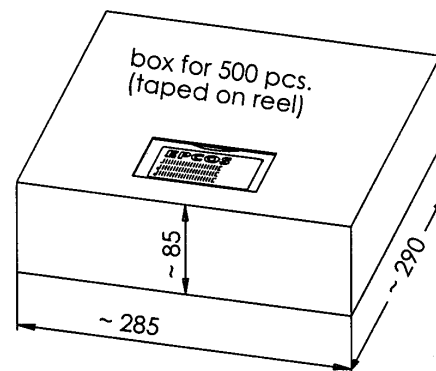
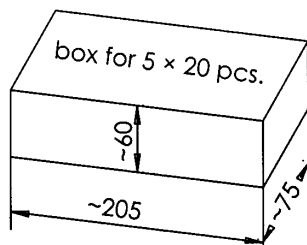
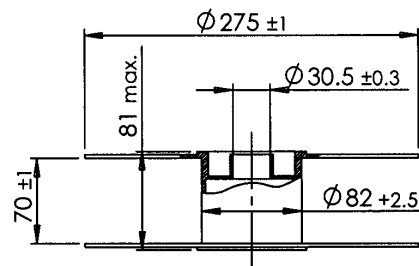
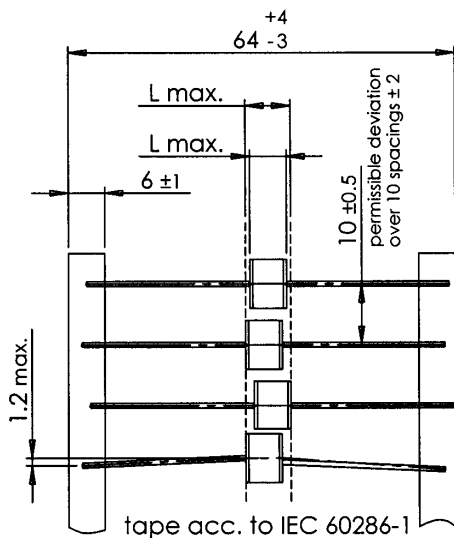


Dimensional drawing in mm



Ordering codes and packing advices

B88069X6331S102 = 100 pcs. on 5 taped stripes B88069X6331T502 = 500 pcs. on tape and reel



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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