

# Switching spark gap

SSG with lead wires

Series/Type: SSG03X-1J Ordering code: B88069X6331\*\*\*\*

Version/Date: Issue 02 / 2009-10-20

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B88069X6331\*\*\*\*

#### SSG with lead wires

SSG03X-1J

#### **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 <sub>N</sub>	350	V
Initial values $^{1)2)}$ Static breakdown voltage $V_S$ First ignition value $V_{S,FTE}$ after 24 hours in darkness Following ignition values $V_{S,FIV}$	≤ 420 290 390	V
Electrical life time $^{3)}$ Breakdown voltage $V_B$ First ignition value $V_{B,FTE}$ after 24 hours in darkness Ignition time $t_I$ at $V_0$ during life Following ignition values $V_{B,FIV}$	≤ 450 ≤ 300 290 390	V ms V
Switching operations at + 25 °C	50 000	Ignitions
Test circuit parameters Open circuit voltage V <sub>0</sub> Loading resistance R Discharge capacitance C Inductance L Discharge peak current I <sub>P</sub>	450 10 680 0.5 ~ 500	V kΩ nF μH A
General technical data Insulation resistance at 100 V Early ignition values below 290 V Breakdown time Maximum switching frequency Maximum loading current Weight	> 100 ≤ 2 ≤ 50 200 50 ~ 2	MΩ % ns Hz mA g
Marking, red positive	EPCOS 350 WWY O 350 - Nominal voltage WW - Calendar week of production Y - Year of production O - Non radioactive	

<sup>1)</sup> At delivery AQL 0,65 level II, DIN ISO 2859

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<sup>&</sup>lt;sup>2)</sup> Fig. 1 and 2

<sup>&</sup>lt;sup>3)</sup> Fig. 3 and 4

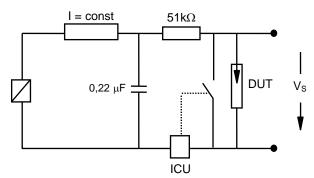
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#### Test circuits and explanations

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



DUT device under test

ICU ignition control unit (sensitivity 10 ... 30  $\mu$ A)

Discharge current 10 ... 20 mA

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

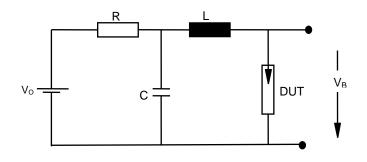


Fig. 2: Explanation of measurands

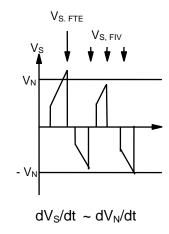
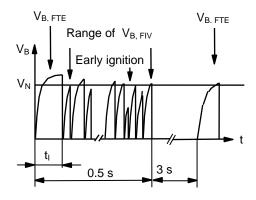


Fig. 4: Explanation of measurands



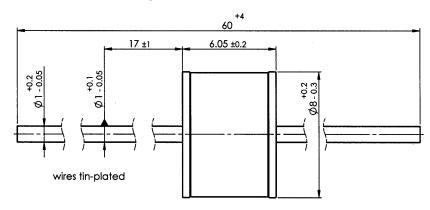
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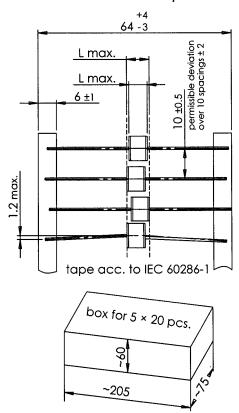
#### Dimensional drawing in mm

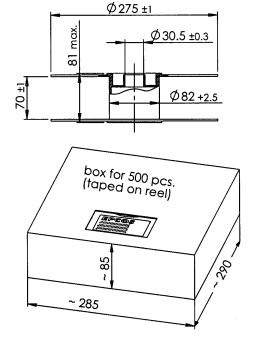


### Ordering codes and packing advices

B88069X6331**S102** = 100 pcs. on 5 taped stripes

B88069X6331**T502** = 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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