

Switching spark gap

SSG with lead wires

Series/Type: FS5,5X-1 Ordering code: B88069X

Ordering code: B88069X3440S102

Version/Date: Issue 08 / 2013-05-22

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B88069X3440S102 Switching spark gap

SSG with lead wires FS5,5X-1

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 $V_{s,\text{FTE}}$ after 24 hours in darkness Following ignition values $V_{s,\text{FIV}}$	≤ 7000 4850 6150	V
Electrical life time $^{3)}$ Breakdown voltage V_B First ignition value $V_{B,FTE}$ after 24 hours in darkness Following ignition values $V_{B,FIV}$	≤ 7000 4000 6600	V
Switching operations at –40 +125 °C	500 000	Ignitions
Test circuit parameters Open circuit voltage V ₀ Loading resistance R Discharge capacitance C Inductance L Discharge peak current I _P	10000 4000 1.5 0.5 ~ 200	V kΩ nF μH A
General technical data Insulation resistance at 100 V Early ignition values between 2000 4000 V Breakdown time Maximum switching frequency Weight	> 100 ≤ 5 ≤ 50 100 ~ 2	MΩ % ns Hz g
Marking, blue positive	EPCOS 5500 WWY O 5500 - Nominal voltage WW - Calendar week of production Y - Year of production O - Non radioactive	

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

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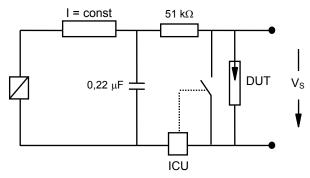
Fig. 1 and 2 Fig. 3 and 4

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Test circuits

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



DUT device under test

ICU ignition control unit (sensitivity 10 ... 30 μ A)

Discharge current 10 ... 20 mA

Fig. 2: Explanation of measurands

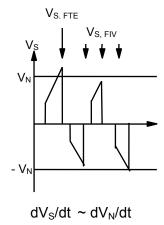


Fig. 3: QC- test circuit (sampling inspection at 25 °C)

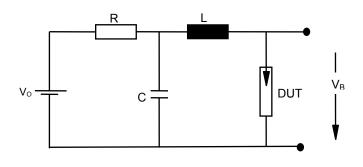
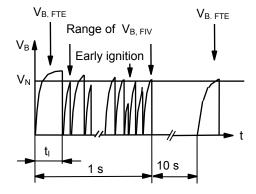
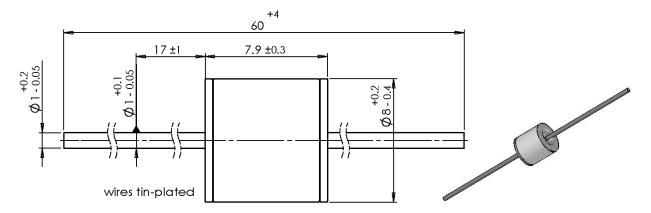


Fig. 4: Explanation of measurands



Dimensional drawing in mm



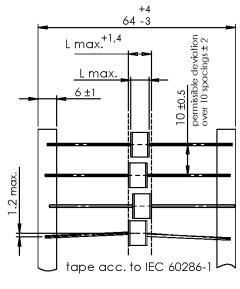
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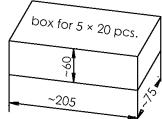
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Ordering code and packing advice

B88069X...**\$102** = 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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