Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Switching spark gap

SSG with lead wires

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

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

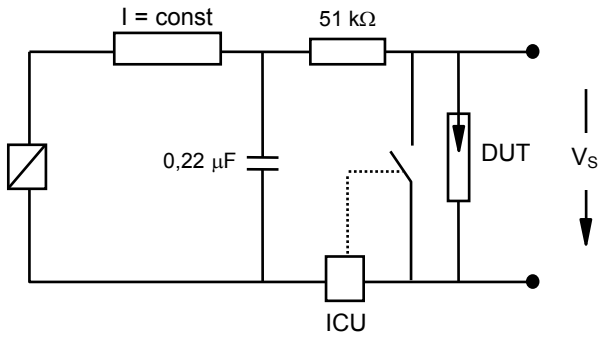
Electrical specifications

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 ... +125 °C	500 000	Ignitions
Test circuit parameters		
Open circuit voltage V_0	10000	V
Loading resistance R	4000	kΩ
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	MΩ
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

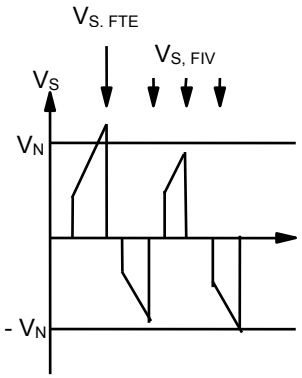
Test circuits

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



DUT device under test
ICU ignition control unit (sensitivity 10 ... 30 µA)
Discharge current 10 ... 20 mA

Fig. 2: Explanation of measurands



$dV_S/dt \sim dV_N/dt$

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

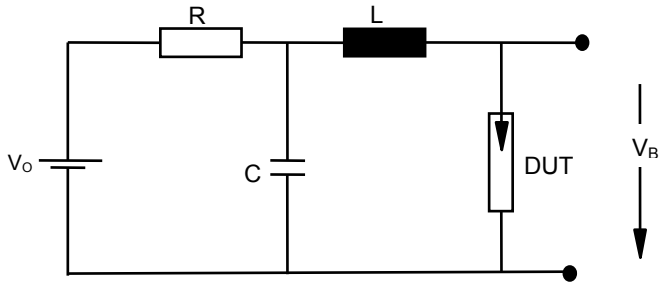
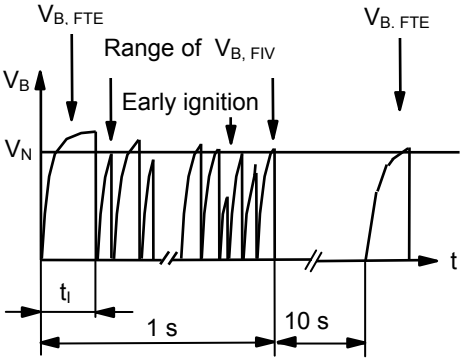
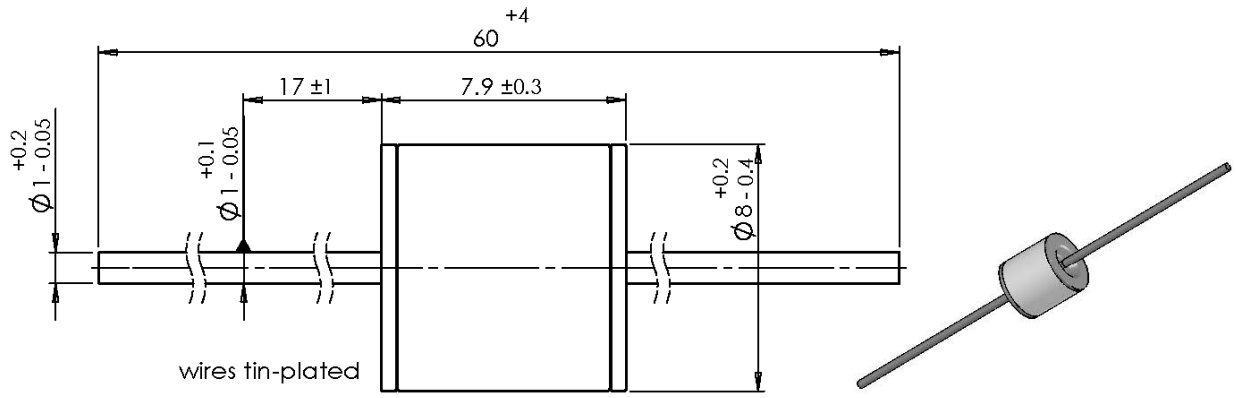


Fig. 4: Explanation of measurands

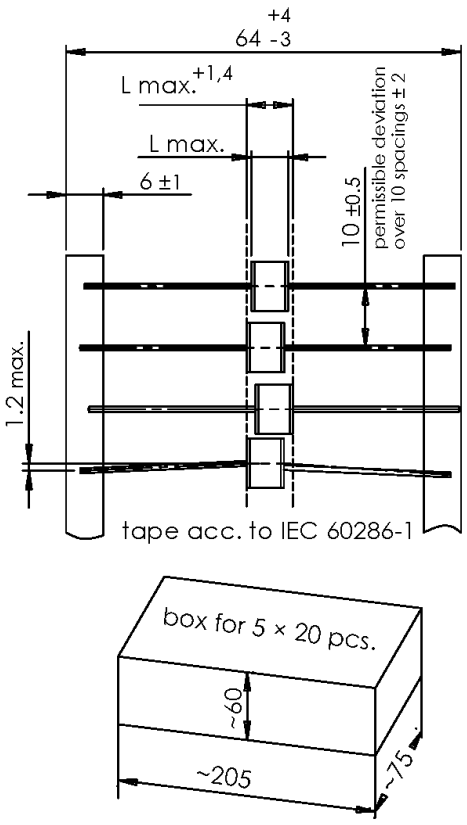


Dimensional drawing in mm



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.

Important notes

The following applies to all products named in this publication:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application.** As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
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