



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!



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## Switching spark gap

SSG with lead wires

**Series/Type:** FS08X-1JG  
**Ordering code:** B88069X3790T502  
Version/Date: Issue 03 / 2008-10-29

Features	Applications
<ul style="list-style-type: none"> <li>▪ Extremely long life time</li> <li>▪ Stable performance over life</li> <li>▪ Insensitive performance against variations in temperature</li> <li>▪ Very low switching losses</li> <li>▪ Very short breakdown time</li> <li>▪ High reliability by robust design</li> <li>▪ RoHS compatibility</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ignition circuits</li> <li>▪ High voltage switch</li> </ul>

**Electrical specifications**

Nominal breakdown voltage $V_N$	800	V
Initial values <sup>2)</sup> Static breakdown voltage $V_S$ <sup>1)</sup> First ignition value $V_{S, FTE}$ after 24 hours in darkness Following ignition values $V_{S, FIV}$	$\leq 950$ 704 ... 896	V V
Electrical life time <sup>3)</sup> 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 $V_{B, FIV}$	$\leq 1000$ <b>S.C.</b> <sup>4)</sup> $\leq 60$ 680 ... 920 <b>S.C.</b> <sup>4)</sup>	V ms V
Switching operations at - 40 °C at + 25 °C at +125 °C at +150 °C at +170 °C (at -40 ... +170 °C )	20 000 70 000 <b>S.C.</b> <sup>4)</sup> 70 000 30 000 10 000 (total 200 000 )	Ignitions Ignitions Ignitions Ignitions Ignitions
Test circuit parameters Open circuit voltage $V_0$ Loading resistance R Discharge capacitance C Inductance L Discharge peak current $I_P$	1000 68 100 0.5 ~ 400	V kΩ nF μH A
General technical data Max. static breakdown voltage at 100 kV/s Insulation resistance at 100 V Early ignition values < 680 V <sup>5)</sup> Breakdown time Maximum switching frequency Maximum loading current Weight	1300 > 100 <b>S.C.</b> <sup>4)</sup> $\leq 1$ $\leq 50$ 400 50 ~ 2	V MΩ % ns Hz mA g

Marking, blue positive

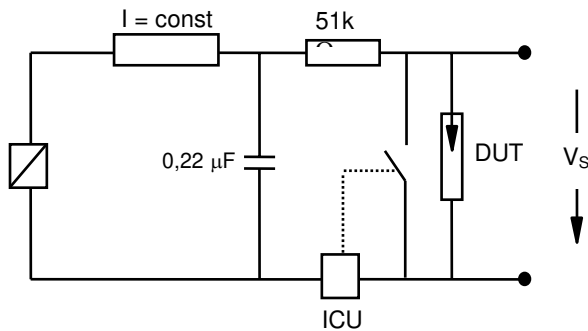
**EPCOS 800 WWY O**

800 - 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) Page 2, Fig. 1 and 2
- 3) Page 2, Fig. 3 and 4
- 4) S.C. = **S**ignificant **C**haracteristic
- 5) No early ignition value < 500 V

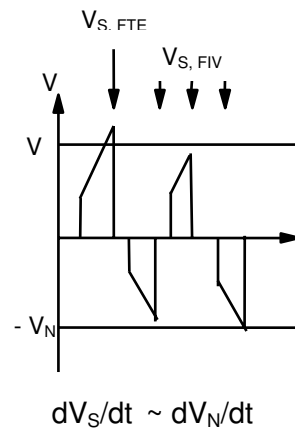
**Figures**

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

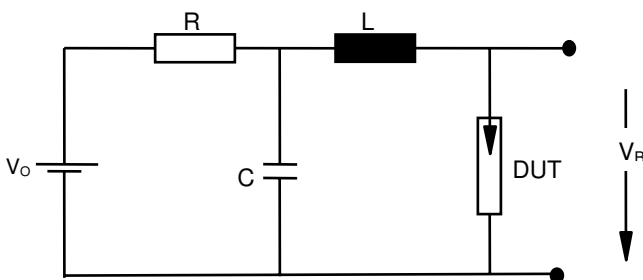


DUT device under test  
 ICU ignition control unit (sensitivity 10 ... 30 µA)  
 Discharge current 10 – 20 mA

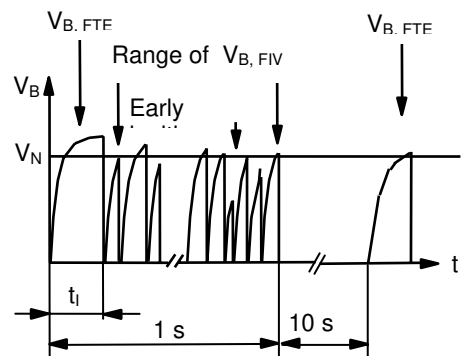
**Fig. 2:** Explanation of measurands



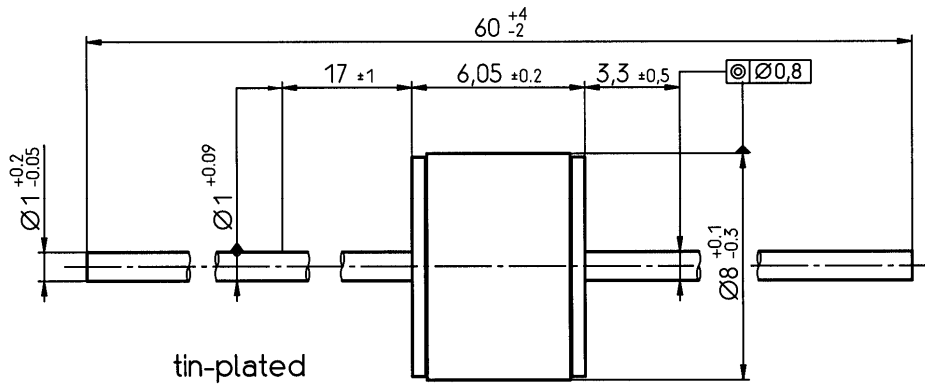
**Fig. 3:** QC- test circuit (sampling inspection at 25 °C)



**Fig. 4:** Explanation of measurands



**Dimensional Drawing**



*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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The following applies to all products named in this publication:

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