



Switching Spark Gap

FS1X-1G

Series/Type:	FS1X-1G
Ordering code:	B88069X3350T502
Date:	30.04.2002
Version:	Issue 03

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Release 2018-10

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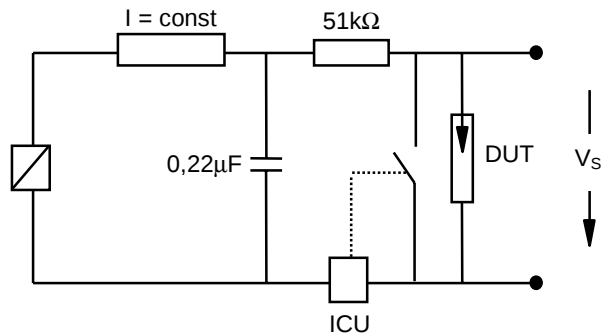
Nominal breakdown voltage V_N	1000	V
Initial values ²⁾		
Static breakdown voltage V_S ¹⁾		
First ignition value $V_{S, FTE}$ after 24 hours in darkness	≤ 1150	V
Following ignition values $V_{S, FIV}$	900 ... 1130	V
Electrical life time ³⁾		
Breakdown voltage V_B		
First ignition value $V_{B, FTE}$ after 24 hours in darkness	≤ 1400	V
Ignition time t_i at V_0 during life	≤ 60	ms
Following ignition values $V_{B, FIV}$	850 ... 1150	V
Switching operations		
at $-40\text{ }^{\circ}\text{C}$	100 000	Ignitions
at $+25; +125\text{ }^{\circ}\text{C}$	200 000	Ignitions
Test circuit parameters		
Open circuit voltage V_0	1400	V
Loading resistance R	110	k Ω
Discharge capacitance C	68	nF
Inductance L	0.5	μH
Discharge peak current I_P	~ 400	A
General technical data		
Insulation resistance at 100 V	> 100	M Ω
Early ignition values between 600 ... 850 V	≤ 1	%
Breakdown time	≤ 50	ns
Maximum switching frequency	400	Hz
Maximum loading current	50	mA
Weight	~ 2	g
Marking, blue	EPCOS 1000 WWY O 1000 - 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

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

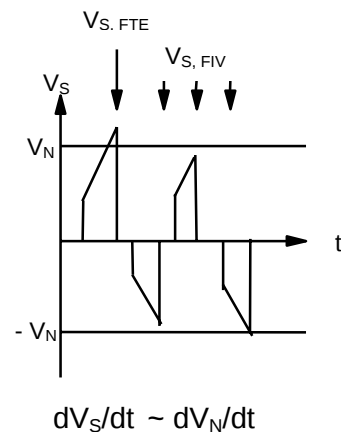


Fig. 3: QC- test circuit (sampling inspection at 25 °C)

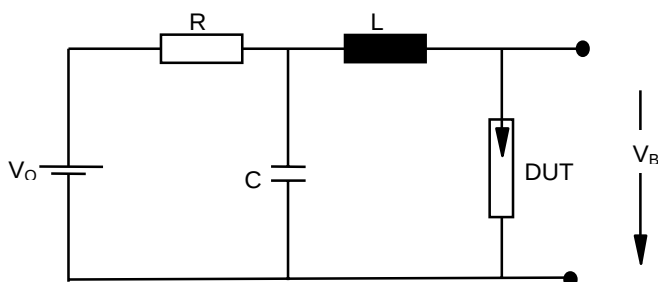
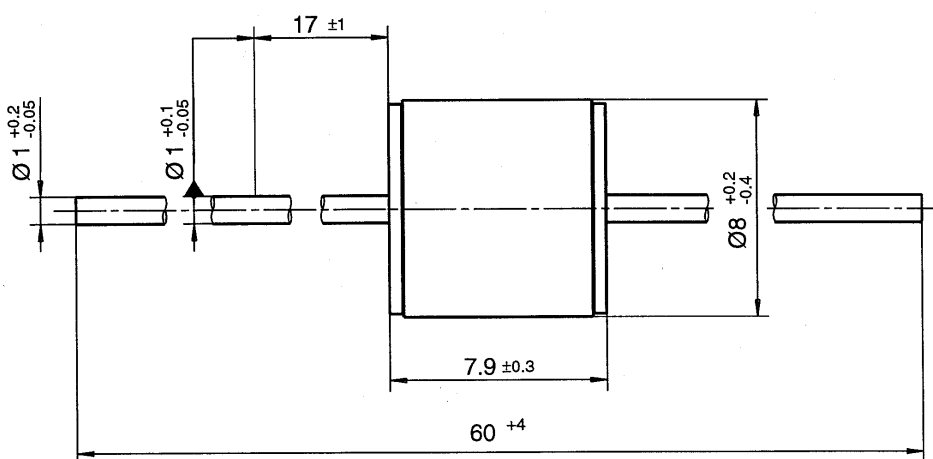
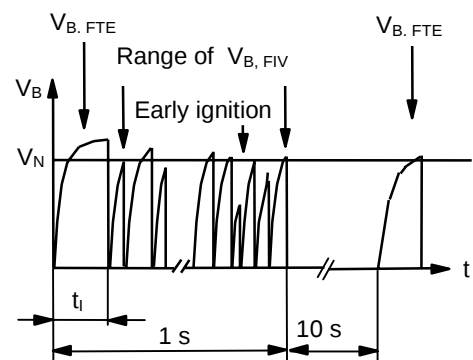


Fig. 4: Explanation of measurands



Not to scale

Dimensions in mm

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