



Switching spark gap

SSG for SMD handling

Series/Type: CAS02XSMD
Ordering code: B88069X6321T602
Version/Date: Issue 02 / 2006-10-30

Features	Applications
<ul style="list-style-type: none"> ▪ Long life time ▪ Stable performance over life ▪ Insensitive performance against variations in temperature ▪ Low switching losses ▪ Very short breakdown time ▪ High reliability by robust design ▪ SMD handling ▪ RoHS-compatible 	<ul style="list-style-type: none"> ▪ Ignition for gas stoves

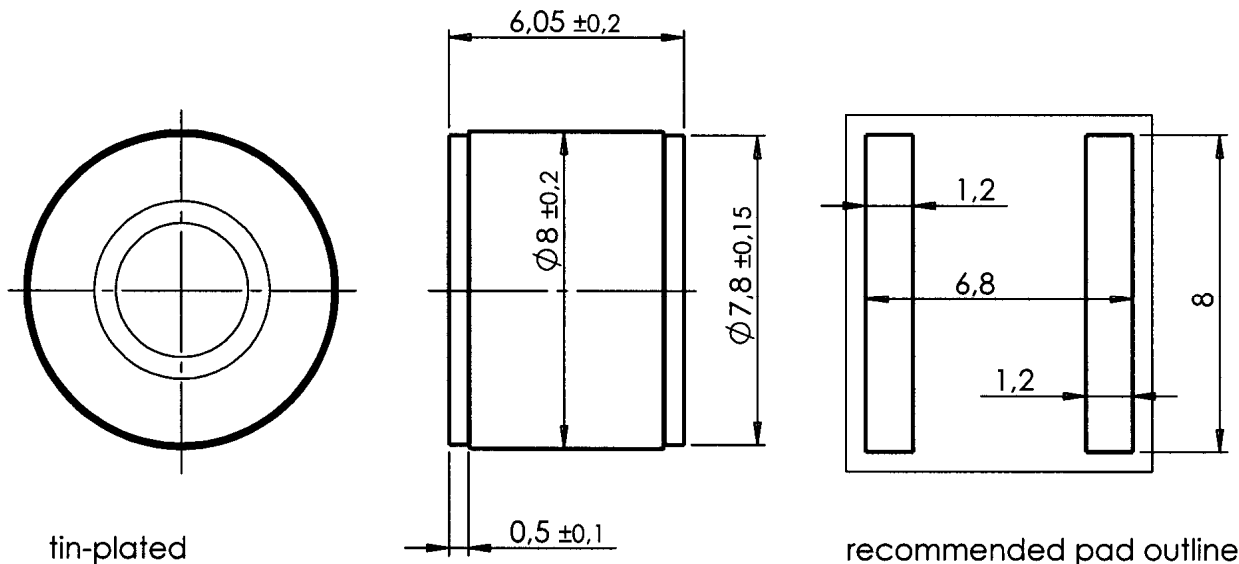
Electrical specifications

DC spark-over voltage ^{1) 2)}	215 ... 255	V
Initial values		
Ignition time t_i after 150 hours in darkness ³⁾	95 99.9 100	%
at -20 °C	≤ 4	≤ 5
at +25; 150 °C	≤ 2	≤ 3
		≤ 7
		≤ 4
Electrical life time A		
Maximum increase of DC spark-over voltage	25	V
Switching operations at +25; 125 °C		
Switching frequency 10 ... 25 Hz	2 000 000	Ignitions
Switching frequency < 10 Hz	4 000 000	Ignitions
Test circuit parameters; 1 s ON, 10 s OFF		
Open circuit voltage V_0	230	V_{ac}
Loading resistance R	15	k Ω
Discharge capacitance C	2.2	μ F
Inductance L	10	μ H
Discharge peak current I_p	~ 300	A
Electrical life time B		
Switching operations at +25 °C		
Switching frequency 1000 Hz	600 000	Ignitions
Test circuit parameters; 1 cycle 10 min ON		
Open circuit voltage V_0	230	V_{ac}
Loading resistance R	1.5	k Ω
Discharge capacitance C	0.1	μ F
Inductance L	7	μ H
Discharge peak current I_p	~ 300	A
Insulation resistance at 100 V_{dc}	> 0.1	G Ω
Capacitance at 1 MHz	< 2	pF
Weight	~ 1.5	g

Operation and storage temperature	-20 ... +150	°C
Climatic category (IEC 60068-1)	20/ 150/ 21	
Marking, red positive	EPCOS CS 230 YYMM O CS - Series 230 - Nominal voltage YY - Year of production MM - Month of production O - Non radioactive	

- 1) At delivery AQL 0.65 level II, DIN ISO 2859
- 2) In ionized mode, after load
- 3) Time from capacitor charged to the first high voltage spark
 Test circuit: $V_{ac} = 198 \text{ V}$; $R = 36 \text{ k}\Omega$; $C = 2.2 \text{ }\mu\text{F}$

Dimensional drawing



recommended pad outline

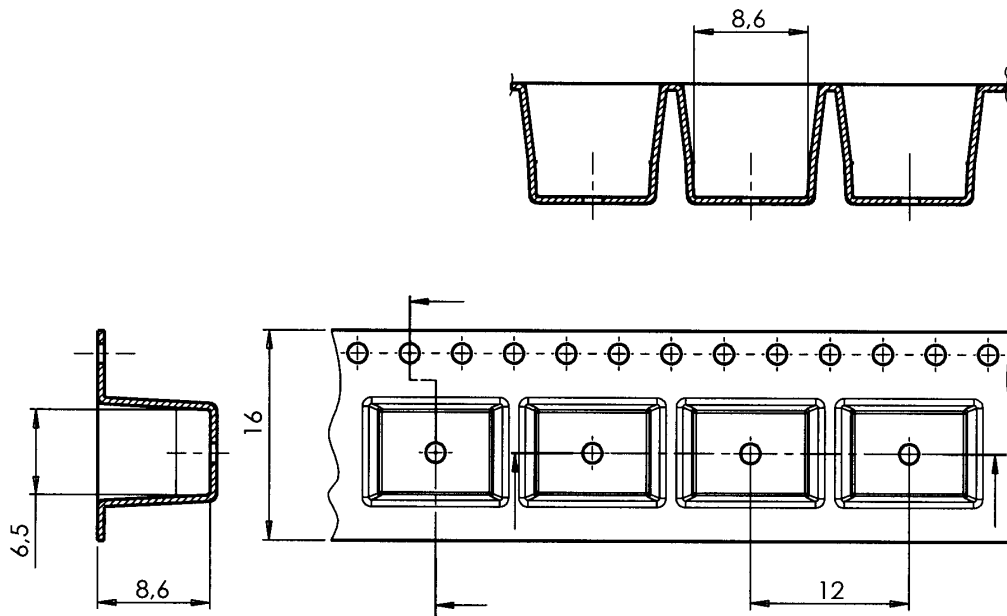
Not to scale

Dimensions in mm

Non controlled document

Packing advice

T602 = SMD-tape with 600 pcs



SMD-tape according to IEC 60286-3

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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