

DC spark-over voltage <sup>1) 2) 3)</sup>	72 ... 108	V
DC spark-over voltage <sup>3) 5)</sup>	72 ... 180	V
DC spark-over voltage <sup>2) 4)</sup>	72 ... 230	V
Impulse spark-over voltage		
at 1 kV/μs   - for 99 % of measured values <sup>3)</sup>	< 500	V
- for 50 % of measured values <sup>3)</sup>	< 380	V
at 1 kV/μs   - for 99 % of measured values <sup>4)</sup>	< 700	V
- for 50 % of measured values <sup>4)</sup>	< 600	V
Insulation resistance at 50 V <sub>dc</sub> <sup>3)</sup>	> 1	GΩ
Capacitance at 1 MHz <sup>3)</sup>	< 1.5	pF
Service life according to EPCOS		
10 operations    8/20 μs <sup>6)</sup>	10	kA
10 operations    8/20 μs <sup>7)</sup>	5	kA
10 operations    50 Hz; 1 s <sup>6)</sup>	10	A <sub>rms</sub>
10 operations    50 Hz; 1 s <sup>7)</sup>	5	A <sub>rms</sub>
Values after loading		
Insulation resistance at 50 V <sub>dc</sub> <sup>3) 8)</sup>	> 10	MΩ
DC spark-over voltage <sup>2) 3)</sup>	65 ... 150	V
DC spark-over voltage <sup>2) 4)</sup>	65 ... 250	V
Impulse spark-over voltage		
at 1 kV/μs   - for 99 % of measured values <sup>3)</sup>	< 700	V
- for 99 % of measured values <sup>4)</sup>	< 900	V
Activation after reflow soldering <sup>9)</sup>		
1 operation      U <sub>RMS</sub> = 600 V; 1 s	2	A
Weight	~ 1.2	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue	<b>EPCOS</b> <b>90 YY O</b> 90    - Nominal voltage YY    - Year of production O     - Non radioactive	

<sup>1)</sup> At delivery AQL 0.65 level II, DIN ISO 2859

<sup>2)</sup> In ionized mode

<sup>3)</sup> Tip or ring electrode to center electrode

<sup>4)</sup> Tip to ring electrode

<sup>5)</sup> After 1 day storage in darkness for 80 % of tubes

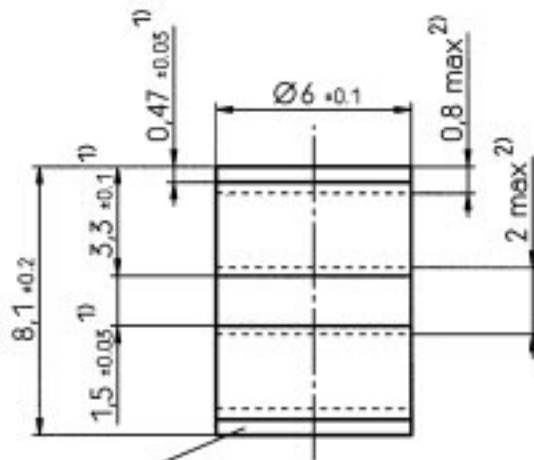
<sup>6)</sup> Total current through center electrode, half value through tip respectively ring electrode

<sup>7)</sup> Total current through center electrode, same value through tip respectively ring electrode

<sup>8)</sup> For 80 % of tubes

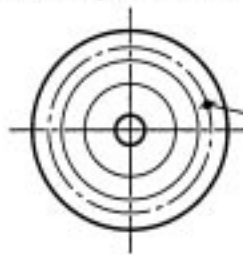
<sup>9)</sup> Total current from ring to tip electrode

Terms in accordance with ITU-T Rec. K.12 and DIN 57845/VDE 0845



Elektroden müssen frei von Farbresten sein /  
 electrodes must be free of paint  
 Werkstoff / material OF - Cu F20  
 Oberfläche verzinkt / surface tin-plated > 7 µm

- 1) Fertigungsmaß ohne Oberfläche /  
 manufacturing dim. w/o plating
- 2) elektr.leitfähige Bereiche /  
 conductive areas



Schichtdicken-Meßpunkt  
 Teilkreis Ø5 ± 0.1  
 measuring point of  
 plating thickness Ø5 ± 0.1  
 Oberfläche mattverzinkt, bleifrei  
 surface dull tin-plated, lead free  
 Zinnschichtdicke } ( 14 ± 7 ) µm  
 thickness of tin  
 Test :  
 AQL 0.65  
 Niv. S - 3 (einfach / single)

Not to scale

Dimensions in mm

Non controlled document

© EPCOS AG 2002. Reproduction, publication and dissemination of this data sheet, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.