



# Surge Arrester

## 3-Electrode-Arrester

**Series/Type:** T30-A90X  
**Ordering code:** B88069X3030C253  
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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> - for 50 % of measured values <sup>3)</sup>	< 500 < 380	V V
at 1 kV/μs - for 99 % of measured values <sup>4)</sup> - for 50 % of measured values <sup>4)</sup>	< 700 < 600	V 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> - for 99 % of measured values <sup>4)</sup>	< 700 < 900	V 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

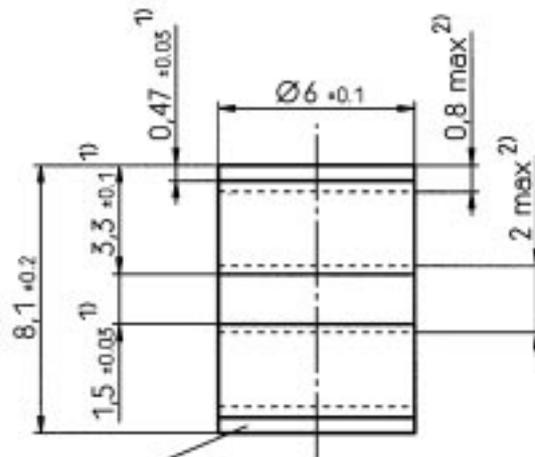
<sup>6)</sup> Total current through center electrode, half value through tip respectively ring electrode

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

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

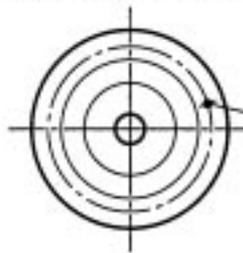
<sup>9)</sup> Total current from ring to tip electrode

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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

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