Surge arrester

2-electrode arrester

Series/Type:	**M51-A230X**
Ordering code:	**B88069X2930C102**
Version/Date:	Issue 05 / 2013-11-27

EPCOS AG is a TDK Group Company.

Surge arrester — B88069X2930C102

2-electrode arrester — M51-A230X

Features

- Very small size
- High current rating
- Very fast response time
- Stable performance over life
- Very low capacitance
- High insulation resistance
- RoHS-compatible

Applications

- Branch exchange
- Line protection
- Subscriber protection
- Alarm system

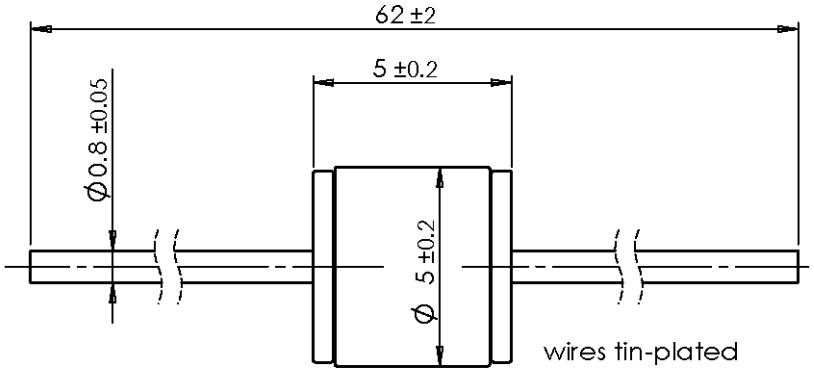
Electrical specifications

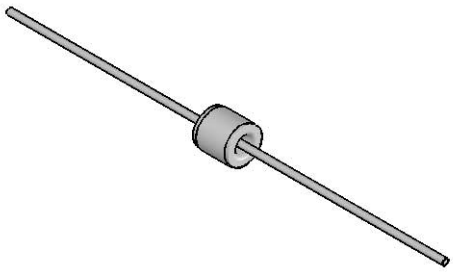
DC spark-over voltage [1) 2)]	230 ± 20	V %
Impulse spark-over voltage		
at 100 V/µs - for 99% of measured values	< 550	V
at 100 V/µs - typical values of distribution	< 500	V
at 1 kV/µs - for 99% of measured values	< 650	V
at 1 kV/µs - typical values of distribution	< 600	V
Service life		
10 operations 50 Hz, 1 s	5	A
1 operation 50 Hz, 0.18 s (9 cycles)	10	A
10 operations 8/20 µs	5	kA
1 operation 8/20 µs [3)]	10	kA
1 operation 10/350 µs	0.5	kA
Insulation resistance at 100 V_{DC}	> 1	GΩ
Capacitance at 1 MHz	< 1	pF
Arc voltage at 1 A	~ 15	V
Glow to arc transition current	~ 0.5	A
Glow voltage	~ 60	V
Weight	~ 1	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/ 90/ 21	
Marking, blue negative	EPCOS 230 YY O 230 - Nominal voltage YY - Year of production O - Non radioactive	

1) At delivery AQL 0.65 level II, DIN ISO 2859
2) In ionized mode
3) After service life DC spark-over voltage may exceed initial values but device will remain in a safe mode

Terms in accordance with ITU-T Rec. K.12, IEC 61663-2 and IEC 61643-311

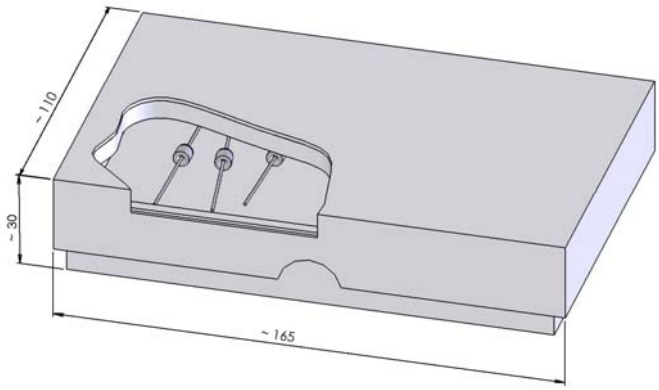
Dimensional drawing in mm





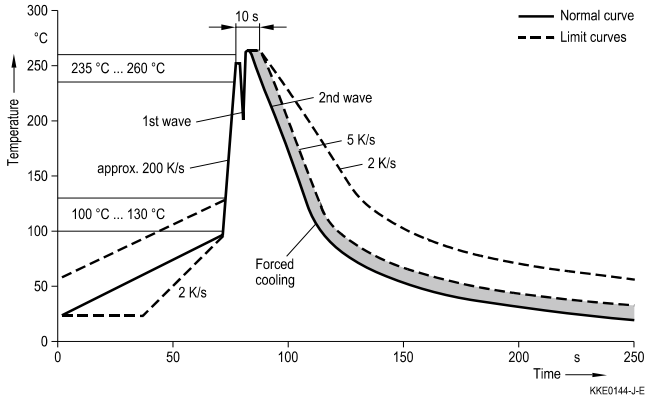
Ordering code and packing advice

*B88069X2930**C102** = 100 pcs. in container*



Soldering parameter

Wave soldering



Soldering profile applied to a single soldering process.

Wave profile features	Pb-free assembly
Solder	Sn 95.5 / Ag 3.8 / Cu 0.7
Solder bath temperature	263 (±3) °C
Dwell time	< 3 s

Cautions and warnings

- Surge arresters must not be operated directly in power supply networks.
- Surge arresters may become hot in case of longer periods of current stress (danger of burning).
- Surge arresters may be used only within their specified values. In case of overload, the head contacts may fail or the component may be destroyed.
- Surge arresters must be handled with care and must not be dropped.
- Damaged surge arresters must not be re-used.

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