

Surge arrester

3-electrode arrester

Series/Type:	T87-A350X
Ordering code:	B88069X8850B502
Date:	2016-02-16
Version:	04

Surge arrester

B88069X8850B502

3-electrode arrester

T87-A350X

Features

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

Applications

- Base stations
- Line protection
- Station protection

Electrical specifications

DC spark-over voltage ^{1) 2) 3)}	350	V
Tolerance	±20	%
Min.	280	V
Max.	420	V
Impulse spark-over voltage ³⁾		
at 100 V/μs - for 99% of measured values	< 700	V
- typical values of distribution	< 600	V
at 1 kV/μs - for 99% of measured values	< 900	V
- typical values of distribution	< 800	V
Service life		
10 operations 50 Hz; 1 s ⁴⁾	10	A
1 operation 50 Hz; 0.18 s (9 cycl.) ⁴⁾	40	A
10 operations [5× (+) & 5× (-)] 8/20 μs ⁴⁾	10	kA
1 operation 8/20 μs ⁴⁾	15	kA
1 operation 10/350 μs ⁴⁾	2	kA
300 operations 10/1000 μs ⁴⁾	200	A
Insulation resistance at 100 V _{DC} ³⁾	> 10	GΩ
Capacitance at 1 MHz ³⁾	< 1.5	pF
Transverse delay time ⁵⁾	< 0.2	μs
Arc voltage at 1 A	~ 35	V
Glow to arc transition current	< 1	A
Glow voltage	~ 200	V
Weight	~ 2	g
Operation and storage temperature	-40 ... +90	°C
Climatic category (IEC 60068-1)	40/090/21	
Marking, red negative	EPCOS 350 YY O 350 - Nominal voltage YY - Year of production O - Non radioactive	
Certifications	UL 497B (E163070)	

Remarks on next page

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

Technical drawing of a three-pin connector. The drawing includes a front view, a side view, and a 3D perspective view.

Front View Dimensions:

- Overall width: 13.4 ± 1.2
- Pin spacing (center-to-center): 10 ± 0.3
- Pin diameter: $\phi 7.2 \pm 0.2$
- Pin length (from base to tip): 14.6 ± 0.5
- Pin thickness (at base): 3.6 ± 0.3
- Pin diameter at base: $\phi 1 \begin{smallmatrix} +0.07 \\ -0.03 \end{smallmatrix}$
- Pin diameter at tip: $\phi 1 \begin{smallmatrix} +0.07 \\ -0.03 \end{smallmatrix}$
- Pin diameter at base (alternative): $6 \begin{smallmatrix} +0.2 \\ -0.4 \end{smallmatrix}$
- Pin diameter at tip (alternative): $6 \begin{smallmatrix} +0.2 \\ -0.4 \end{smallmatrix}$

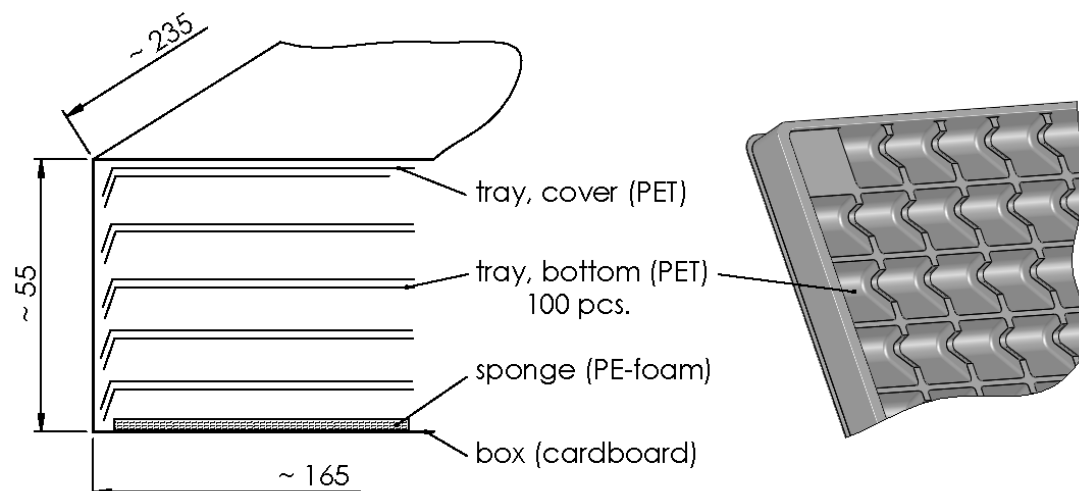
Side View Dimensions:

- Overall height: $8 \begin{smallmatrix} +0.2 \\ -0.1 \end{smallmatrix}$
- Pin thickness (at base): 0.1 min.

3D Model:

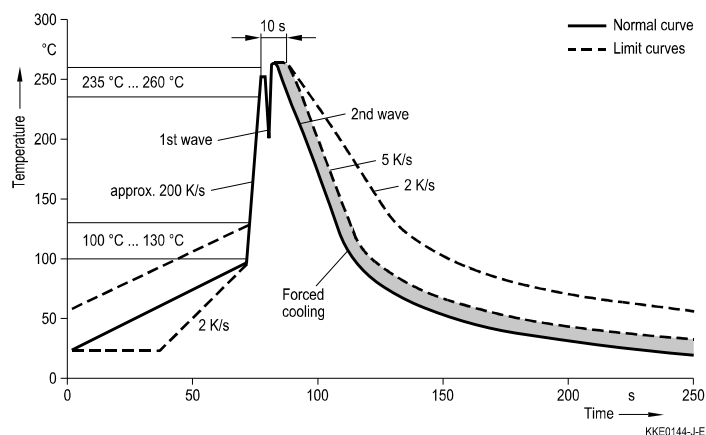
- The 3D model shows the connector with a "tin-plated" finish.

B88069X8850B502 = 500 pcs. on trays



Soldering parameter

Wave soldering



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

Soldering profile applied to a single soldering process.

Cautions and warnings

- Do not operate surge arresters in power supply networks, whose maximum operating voltage exceeds the minimum spark-over voltage of the surge arresters.
- If the contacts of the surge arresters are defective, current load can cause sparks and loud noises.
- Surge arresters may become hot in the event of longer periods of current stress (burn risk). In the event of overload the connectors may fail or the component may be destroyed.
- Surge arresters must be handled with care and must not be dropped.
- Do not continue to use damaged surge arresters.

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