



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Surge arrester

2-electrode arrester

Series/Type: A80-A230XSMD
Ordering code: B88069X1620T602
Version/Date: Issue 05 / 2014-01-08

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Features

- Standard size
- Fast response time
- High current rating
- Stable performance over life
- Very low capacitance
- High insulation resistance
- Excellent SMD handling
- RoHS-compatible

Applications

- Branch exchange (MDF)
- Line protection
- Subscriber protection

Electrical specifications

DC spark-over voltage ^{1) 2)}	230 ± 20	V %
Impulse spark-over voltage		
at 100 V/μs - for 99% of measured values	< 500	V
- typical values of distribution	< 450	V
at 1 kV/μs - for 99% of measured values	< 650	V
- typical values of distribution	< 550	V
Service life ⁸⁾		
10 operations 50 Hz; 1 s	20	A
1 operation 50 Hz; 0.18 s (9 cycles)	100	A
10 operations 8/20 μs	20	kA
1 operation 8/20 μs	25	kA
1 operation 10/350 μs	2.5	kA
300 operations 10/1000 μs	200	A
Insulation resistance at 100 V _{DC}	> 10	GΩ
Capacitance at 1 MHz	< 1.5	pF
Arc voltage at 1 A	~ 15	V
Glow to arc transition current	~ 0.5	A
Glow voltage	~ 60	V
Weight	~ 1.5	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	

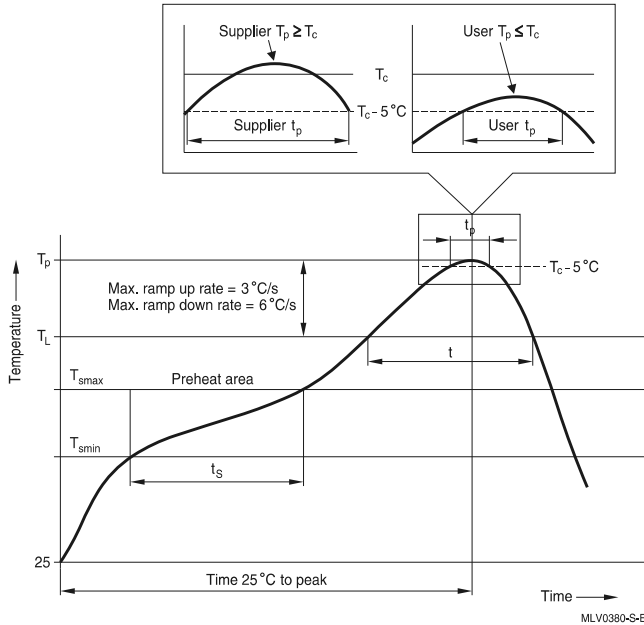
¹⁾ At delivery AQL 0.65 level II, DIN ISO 2859

²⁾ In ionized mode

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

Soldering parameters

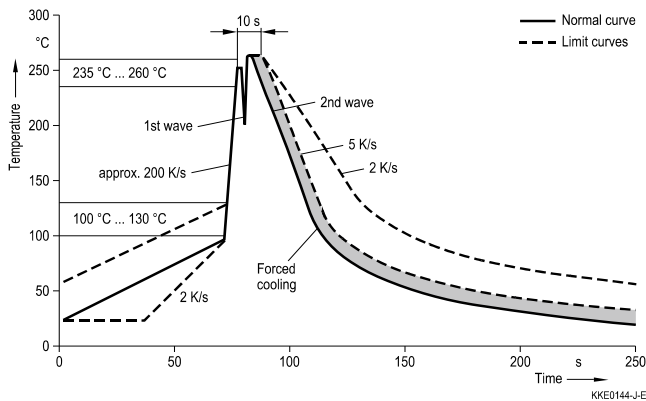
Reflow soldering



Reflow profile features		Sn- Pb eutectic assembly	Pb-free assembly
Preheat and soak - Temperature min - Temperature max - Time	T_{smin} T_{smax} t_{smin} to t_{smax}	100 °C 150 °C 60 ... 120 s	150 °C 200 °C 60 ... 180 s
Average ramp-up rate	T_{smax} to T_p	max. 3°C/s	max. 3°C/s
Liquidous temperature Time at liquidous	T_L t_L	183 °C 60 ... 150 s	217 °C 60 ... 150 s
Peak package body temperature *, Classification temperature **	T_p, T_c	220 ... 235 °C **	245 ... 260 °C **
Time (t_p) ** within 5 °C of the specified classification temperature (T_c)		20 s ***	30 s ***
Average ramp-down rate	T_p to T_{smax}	max. 6°C/s	max. 6°C/s
Time 25 °C to peak temperature		max. 6 min	max. 8 min

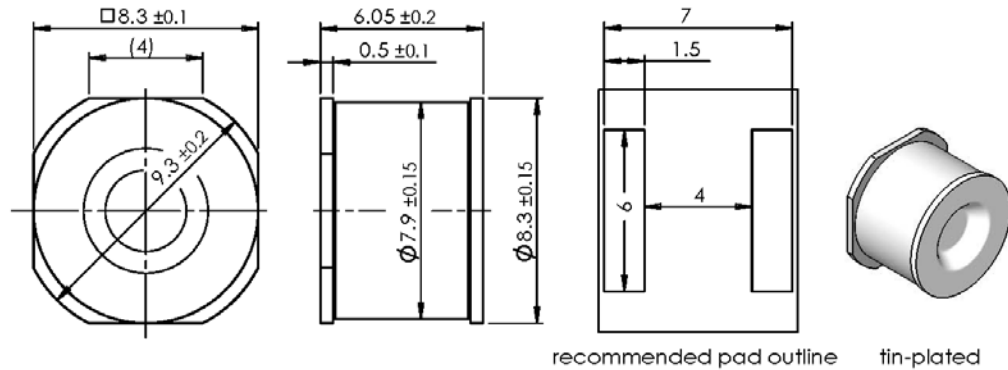
* = Tolerance for peak profile temperature (T_p) is defined as a supplier minimum and a user maximum.
 ** = For details please refer to JEDEC J-STD-020D.
 *** = Tolerance for time at peak profile temperature (t_p) is defined as a supplier minimum and a user maximum.

Wave soldering

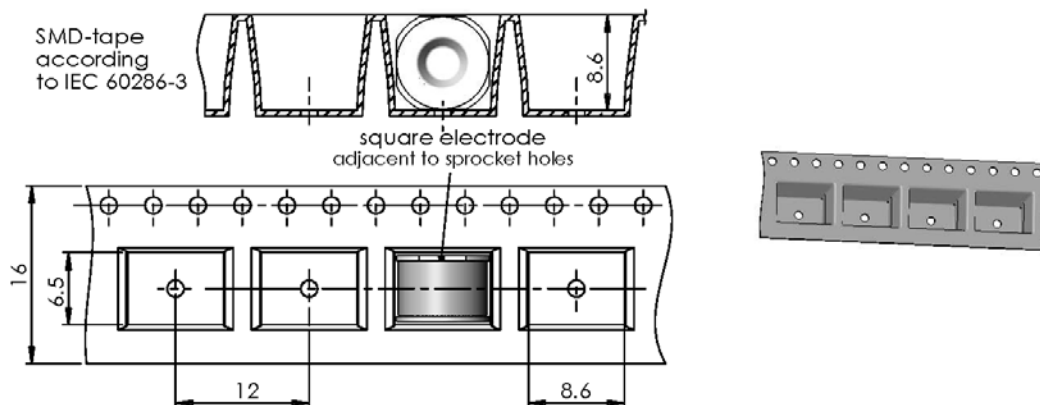


Wave profile features	Pb-free assembly
Solder	Sn 95.5 / Ag 3.8 / Cu 0.7
Solder bath temperature	263 (± 3) °C
Dwell time	< 3 s

Soldering profile applied to a single soldering process.

Dimensional drawing in mm

Ordering code and packing advice

B88069X1620T602 = 600 pcs. on SMD-tape


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).
- If the contacts of the surge arrester are defective, current stress can lead to the formation of sparks and loud noises.
- Surge arresters may be used only within their specified values. In case of overload, the lead 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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