

# SURGiNG

紹 鑫 實 業



# SurgeArresters

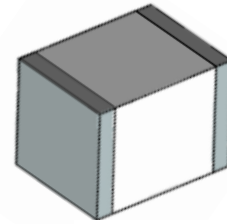
## 陶瓷气体放电管

SMA Series

### Features

- Small Size Design 2.9×2.1×1.9mm
- Current Handling Capability 500A@ 8/20us
- Low Capacitance and Insertion Loss
- Fast Response and Long Service Life
- Reliable to Protect Electrostatic Surge
- Moisture sensitivity level: Level 1

### Exterior

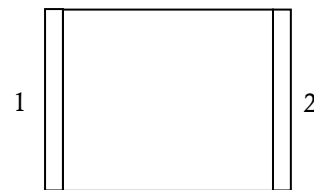


SMD

### Application information

- RS485/232/422
- Internet

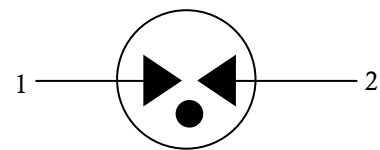
### Package (Top View)



### Agency Approvals

Icon	Description
<b>RoHS</b>	Compliance with 2011/65/EU
<b>HF</b>	Compliance with IEC61249-2-21:2003
	Mean lead free

### Schematic Symbol



### Electrical Parameter

DC Breakdown Voltage 1)2)	100V/s	480-720	V
Impulse Spark-over Voltage	At 1kV/μs	for 99 % of measured values	≤ 1200
	At 1kV/μs	Typical values of distribution	≤1100
Impulse Discharge Voltage 3)	8/20μs, ±5Times	500	A
Impulse Discharge Voltage 3)	10/700μs, ±5Times	6000	V
Arc Voltage	At 1A	~10	V
Insulation Resistance	DC=100V	≥1	GΩ
Capacitance at 1 MHz	VDC=0.5V	≤0.5	pF
Weight		~0.062	g
Operating And Storage Temperature		-40-125	℃
Marking		Without	

1) At delivery AQL 0.65 level II ISO 2859

2) In ionized mode

3) Terms and waveforms in accordance with ITU-T Rec. K. 12; IEC 61643-21

### Part Numbering System

SMA 600 XN  
 (1) (2) (3)

- (1) SURGiNG Gas Discharge Tube
- (2) Series: DC Breakdown Voltage, e.g.: 600 = 600V
- (3) Tolerance of DC Breakdown Voltage, XM =  $\pm 20\%$   
 XN =  $\pm 30\%$

### Product Characteristics

Lead Material	Copper
Body Material	Ceramics
Terminal Finish	100% Matte-Tin Plated

### Environmental Reliability Characteristics

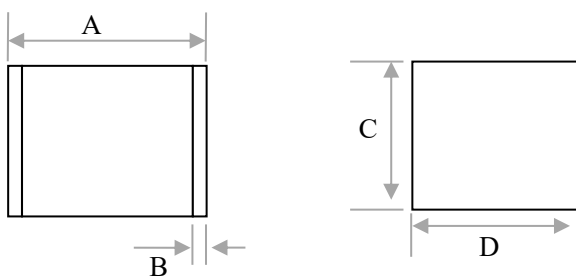
Testing items	Technical standards
High Temperature Storage Test	Temperature: 125°C Time: 2H
Low Temperature Storage Test	Temperature: -40°C Time: 2H
Vibration	Frequency: 10-500Hz Amplitude: 0.15mm Time: 45mins
Resistance of soldering heat	Temperature: 260 $\pm$ 5°C Time of dip soldering: 10s, 1time

Note: Up-screen program can be specified by customer's request via contacting SURGiNG service

### Solderability test

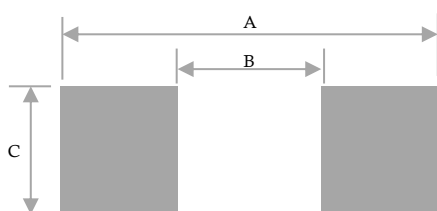
Solderability	Solder Pot Temperature:	245°C $\pm$ 5°C
	Solder Dwell Time:	4-6 seconds

### Product Dimensions



REF	mm	inch
A	2.9 $\pm$ 0.3	0.114 $\pm$ 0.012
B	0.3 $\pm$ 0.1	0.011 $\pm$ 0.004
C	1.9 $\pm$ 0.2	0.075 $\pm$ 0.008
D	2.1 $\pm$ 0.2	0.084 $\pm$ 0.008

### Recommended Soldering Pad



REF	mm	inch
A	3.1	0.122
B	2.0	0.079
C	2.3	0.091

