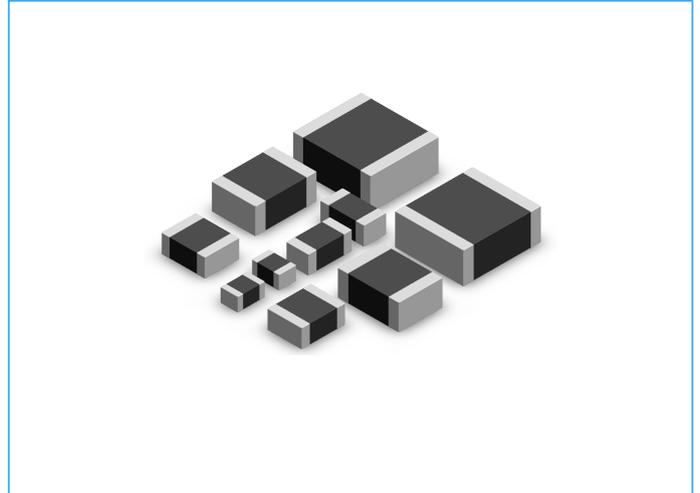


## Surface Mount Multilayer Varistor

### SV0806H271G0F

#### Description

The SV0806H271G0F is based on Multilayer fabrication technology. These components are designed to suppress a variety of transient events, including those specified in IEC 61000-4-2 or other standards used for Electromagnetic Compliance (EMC). The SV0806H271G0F is typically applied to protect integrated circuits and other components at the circuit board level. It can operate over a wider temperature range than zener diodes.



#### Features

- u Rectangle, sizes serialization for hybrid integrated circuit or printed circuit surface mount components
- u There are many side electrode lead-out material, particularly suitable for surface mount technology for solderability and resistance to soldering heat of the stringent requirements
- u Fast response (<1ns)
- u Low leakage current, low clamping voltage
- u Suitable for reflow, wave soldering and hot air hand soldering

#### Applications

- u Application for Mother Board, Notebook, Cellular Phone, PDA, handheld device, DSC, DV, Scanner, and Set- Top Box...etc.
- u Suitable for Push-Button, Power Line and Low Frequency single line over-voltage protect.

## Surface Mount Multilayer Varistor

**SV0806H271G0F**

### Electrical Characteristics (25±5°C)

Symbol	Minimum	Typical	Maximum	Units
$V_{RMS}$	—	—	175	V
$V_{DC}$	—	—	225	V
$V_V$	243	—	297	V
$V_C$	—	—	450	V
$I_{max}$	—	—	200	A

$V_{RMS}$  - Maximum AC operating voltage the varistor can maintain and not exceed 10 $\mu$ A leakage current.

$V_{DC}$  - Maximum DC operating voltage the varistor can maintain and not exceed 10 $\mu$ A leakage current.

$V_V$  - Voltage across the device measure at 1mA DC current.

Equivalent to  $V_{BR}$  "breakdown voltage".

$V_C$  - Maximum peak current across the varistor with 8/20 $\mu$ s waveform and 1A pulse current.

$I_{max}$  - Maximum peak current which may be applied with 8/20 $\mu$ s waveform without device failure.

# Surface Mount Multilayer Varistor

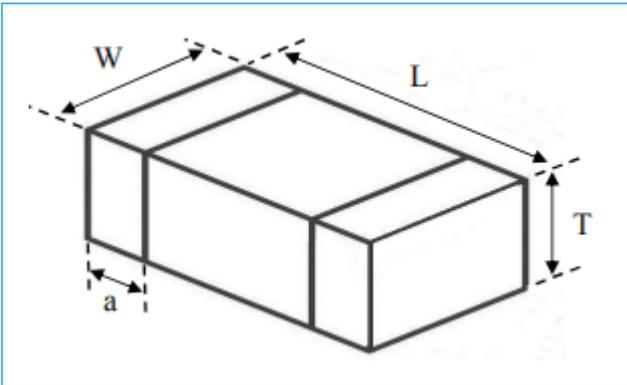
**SV0806H271G0F**

## Shape & Dimensions and Parts & Components

Shape & Dimensions: See Fig.1 and Table 1.

Parts & Components: See Fig.2 and Table 2.

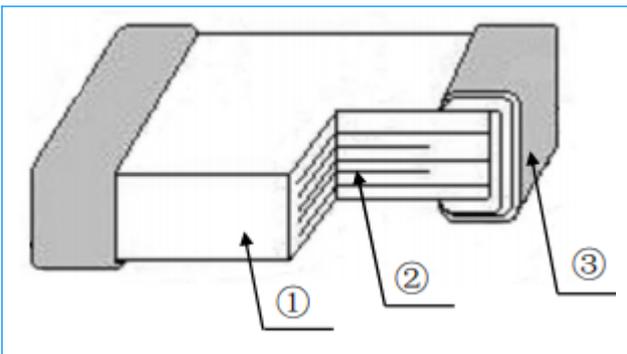
**Fig.1**



**Table 1**

Type	L (mm)	W (mm)	T (mm)	a (mm)
<b>0806</b>	2.3+0.2/-0.2	1.8+0.2/-0.2	2.0 Max.	0.50±0.30

**Fig.2**



**Table 2**

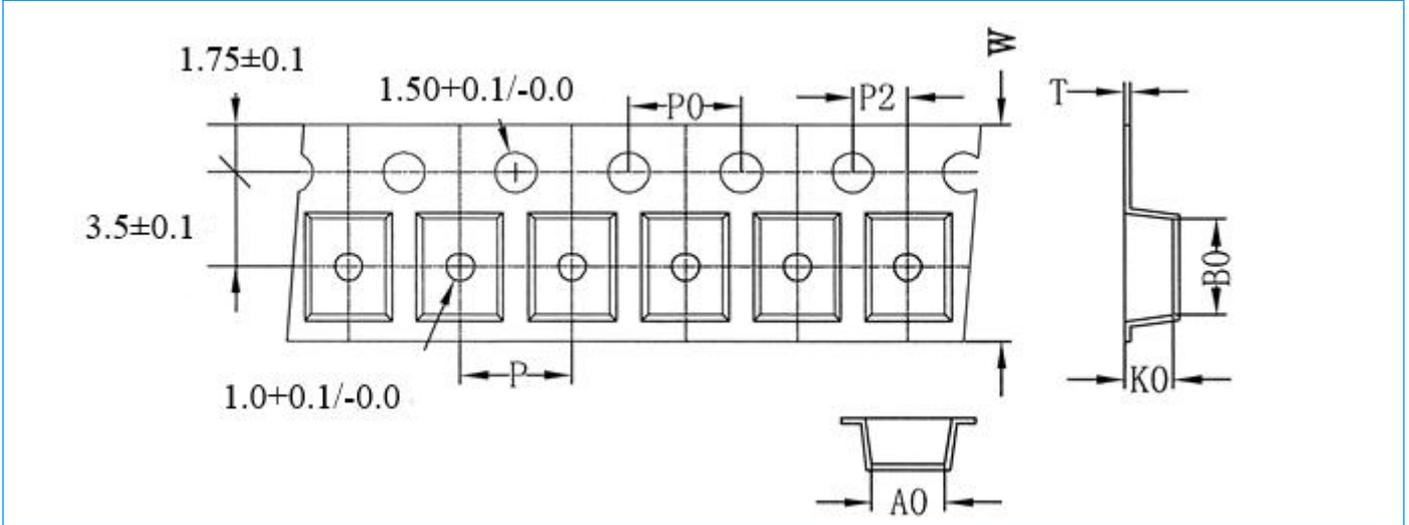
Part	①	②	③
<b>Component</b>	ZnO Semiconductor Ceramics for Chip Varistor	Internal Electrode (Ag or Ag-Pd)	Terminal Electrode (Ag/Ni/Sn three layers)

# Surface Mount Multilayer Varistor

## SV0806H271G0F

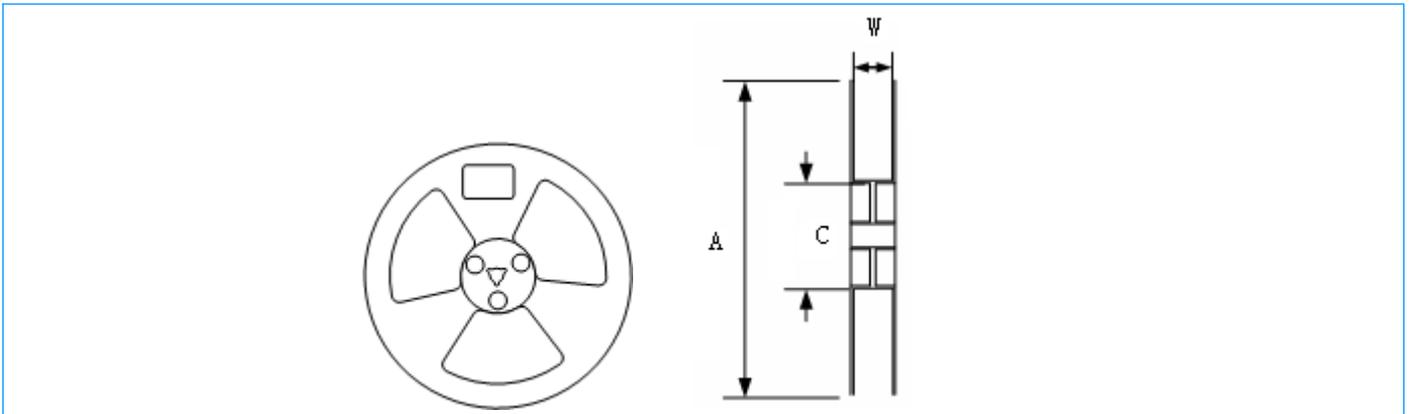
### Taping

#### Carrier Tape Dimensions (Unit: mm)



Type	A0 (±0.2)	B0 (±0.2)	K0 Max.	T Max.	W (±0.3)	P0 (±0.2)	P (±0.2)	P2 (±0.2)
0806	2.1	2.5	2.5	0.3	8.0	4.0	4.0	2.0

#### Taping Reel Dimensions (Unit: mm)



Type	Spec.	Dimensions		
		A	W	C
0806	7"	178±2	8.4±2.0/-0.0	58±2

### Packaging Quantity

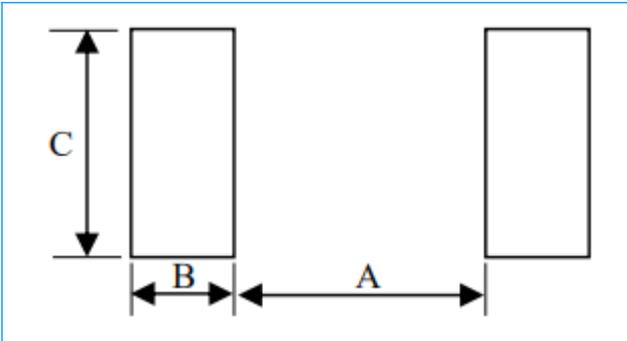
Type	Tape	Quantity (pcs/reel)
0806	Embossed Tape	2000

# Surface Mount Multilayer Varistor

**SV0806H271G0F**

## Soldering Recommendation

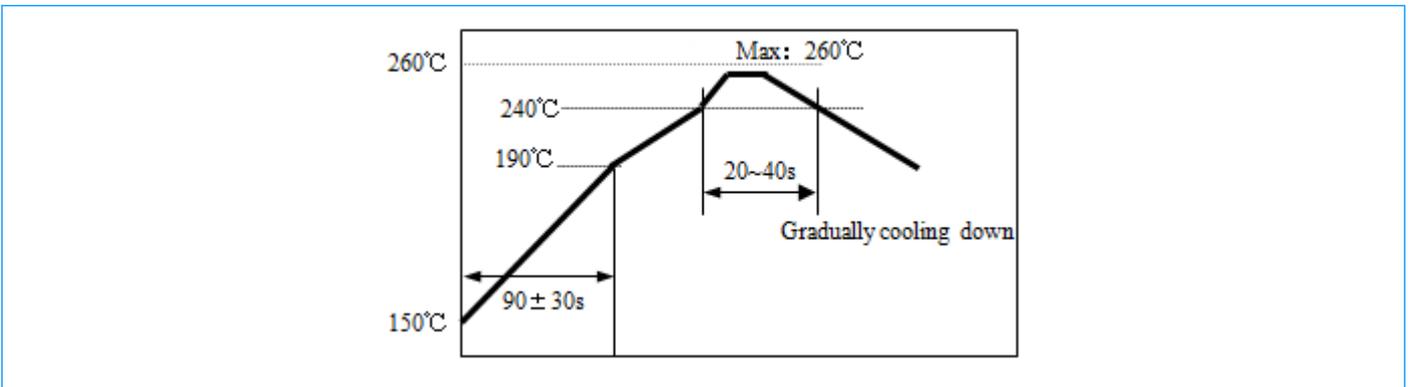
### Recommended Land Pattern



Type	A (mm)	B (mm)	C (mm)
<b>0806</b>	1.4~1.8	0.8~1.2	1.8~2.2

### Recommended Soldering Profile

- u Pb Free Solder Paste: Sn/Ag/Cu (96.5/3.0/0.5).
- u Max time at max temp: 10sec.
- u Allowed Reflow time: 2x Max.



## Notes & Warnings

- u Storage temperature in original packaging: -10~+40°C.
- u Relative Humidity: ≤70%RH.
- u Keep away from corrosive atmosphere and sunlight.
- u Period of Storage: 12 Months.