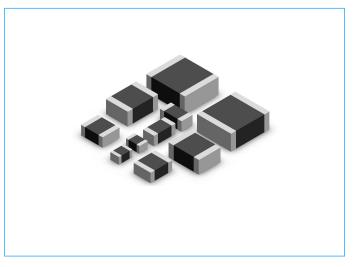




SV0806H271G0F

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

- Rectangle, sizes serialization for hybrid integrated circuit or printed circuit surface mount components
- 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
- ♦ Fast response (<1ns)</p>
- Low leakage current, low clamping voltage
- Suitable for reflow, wave soldering and hot air hand soldering

Applications

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





SV0806H271G0F

Electrical Characteristics (25±5°C)

| Symbol | Minimum | Typical | Maximum | Units |
|------------------|---------|---------|---------|-------|
| V _{RMS} | — | _ | 175 | V |
| VDC | — | — | 225 | V |
| Vv | 243 | _ | 297 | V |
| Vc | _ | _ | 450 | V |
| I _{max} | _ | _ | 150 | A |

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

 V_{DC} - Maximum DC operating voltage the varistor can maintain and not exceed 10µA leakage current.

- $V_V\,$ Voltage across the device measure at 1mA DC current. Equivalent to V_{BR} "breakdown voltage".
- Vc Maximum peak current across the varistor with 8/20µs waveform and 1A pulse current.
- I_{max} Maximum peak current which may be applied with 8/20µs waveform without device failure.

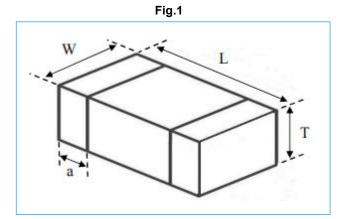




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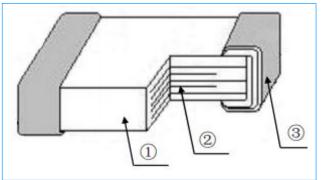
Shape & Dimensions and Parts & Components

Shape & Dimensions: See Fig.1 and Table 1. Parts &Components: See Fig.2 and Table 2.



| Table 1 | | | | | |
|---------|--------------|--------------|----------|-----------|--|
| Туре | L (mm) | W (mm) | T (mm) | a (mm) | |
| 0806 | 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 | | | |
| Component | ZnO Semiconductor Ceramics for Chip Varistor | Internal Electrode (Ag or Ag-Pd) | Terminal Electrode (Ag/Ni/Sn three layers) | | | |

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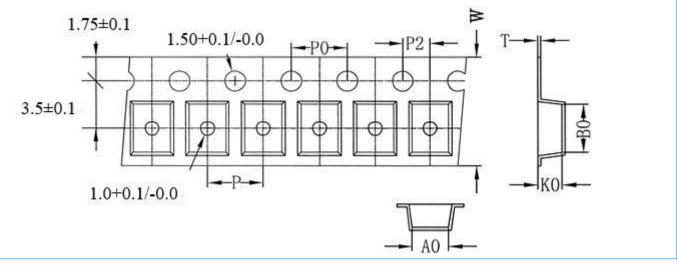




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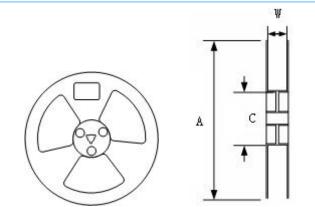
Taping

Carrier Tape Dimensions (Unit: mm)



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

Taping Reel Dimensions (Unit: mm)



| Turne | D irector | Dimensions | | | |
|-------|------------------|------------|--------------|------|--|
| Туре | Spec. | А | W | С | |
| 0806 | 7" | 178±2 | 8.4+2.0/-0.0 | 58±2 | |

Packaging Quantity

| Туре | Таре | Quantity (pcs/reel) |
|------|---------------|---------------------|
| 0806 | Embossed Tape | 2000 |

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|-------------------------------|-----|--|
| | | @SOCAY Electronics Corp., Ltd. 2021 |
| Revision January 15, 2021 | 4/5 | Specifications are subject to change without notice. |

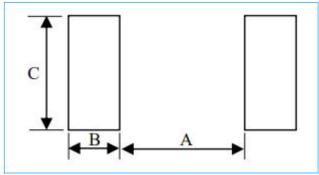




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Soldering Recommendation

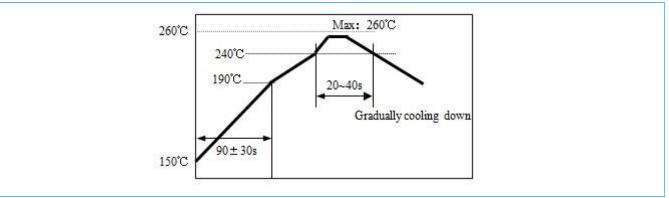
Recommended Land Pattern



| Туре | A (mm) | B (mm) | C (mm) |
|------|---------|---------|---------|
| 0806 | 1.4~1.8 | 0.8~1.2 | 1.8~2.2 |

Recommended Soldering Profile

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



Notes & Warnings

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