

ShenZhen HuaXingAn Electronics CO.,LTD

SPECIFICATTON FOR APPROVAL

CUSTOMER NAME: _____

PRODUCT NAME: _____ **TPMOV** _____

HuaXingAn P/N : _____ **FSVA33V431KA** _____

Date : _____ **2022-11-12** _____

Customer

Manufacturing Department: _____

Quality Assurance Department: _____

Engineering Department: _____

company seal:

Supplier

Manufacturing Department: _____ **Lui Zhi Wei** _____

Quality Assurance Department: _____ **Wei Yu** _____

Engineering Department: _____ **Chen Tan wang** _____

company seal:

TEL : +86 - 755- 27465585
Email: sales@huaandz.com

Fax : +86 - 755- 27270662
abc0734@126.com

Address:5F, Building C, No.30, Aviation Road, SanWei, XiXiang Street, BaoAn District,ShenZhen City, GuangDong Province,China 518126

Web: www.huaandz.com

| | | | |
|------------------|--------------|--|------|
| Model | FSVA33V431KA | | |
| 1.OUTLINE | | | |
| 1.1 | APPEARANCE | No defect, no black edge metal powder adhesion | |
| 1.2 | DIMENSIONS | DIMENSIONS (mm) | |
| | | L (±2.0) | 43.9 |
| | | W (±2.0) | 42.8 |
| | | W1 (±2.0) | 41 |
| | | T (±2.0) | 16 |
| | | F (±2.0) | 25.5 |
| | | L1 (±2.0) | 19.3 |
| | | Polar surface material: Aluminum | |
| | V fastening | | |

2:Product print:



3: Status of Switch Contacts of Remote Indicator

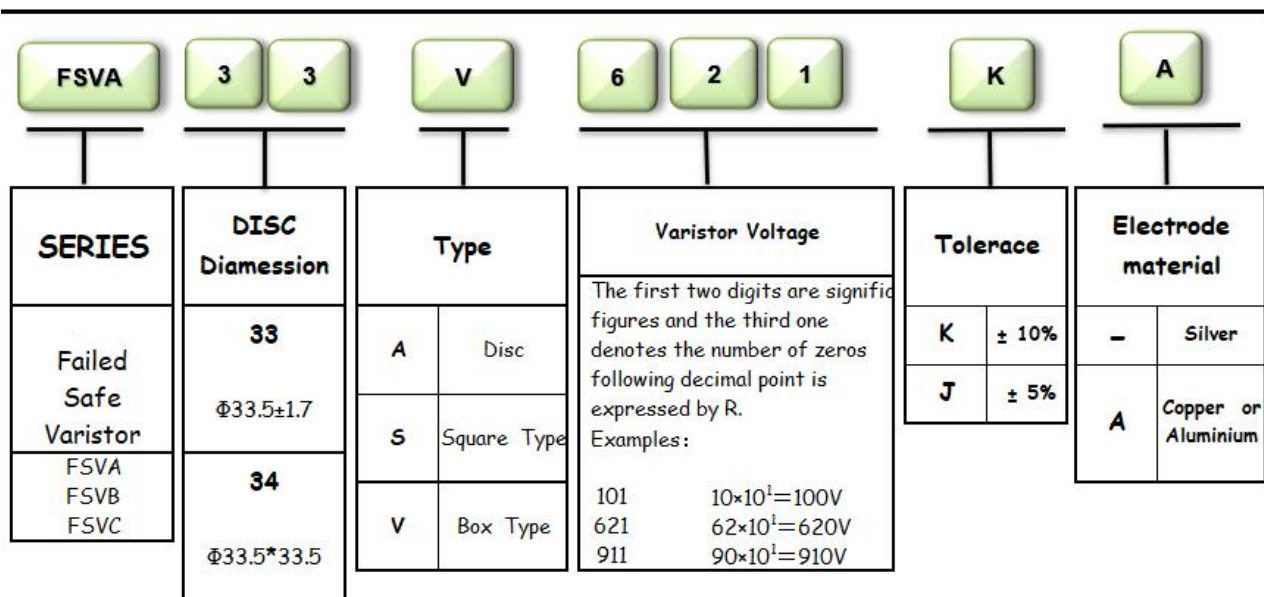
| STATUS OF SWITCH CONTACTS OF REMOTE INDICATOR | |
|--|--|
| Normal Status | Failure Status |
| <p>Upper Remote Indicator: Normally Open</p> <p>Bottom Remote Indicator: Normally Closed</p> | <p>Upper Remote Indicator: Normally Closed</p> <p>Bottom Remote Indicator: Normally Closed</p> |

2. Electrical / Thermal Specification:


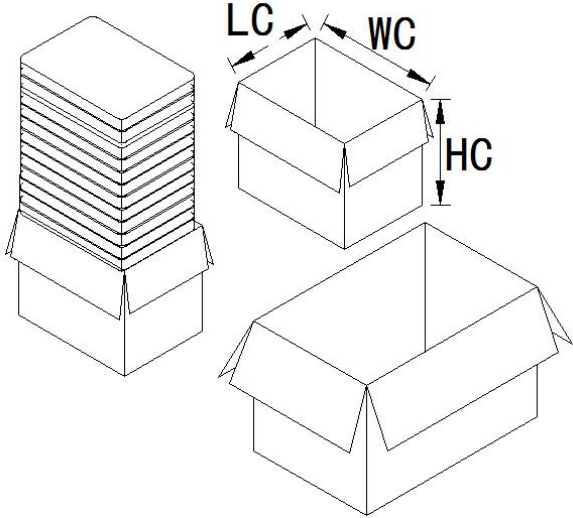
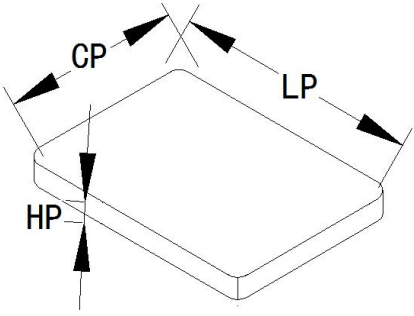
| | | |
|--|-------------------------|--|
| Maximum ac continuous working voltage (最大持续交流工作电压) | 275V | |
| Maximum dc continuous working voltage (最大持续直流工作电压) | 350V | |
| Varistor Voltage (压敏电压) | 387-473V | V0.1mA □ V1mA ■ |
| Maximum DC Leakage Curren (漏电流) | 15µA | At 75% of Varistor Voltage |
| Nonlinear exponent(α) (非线性系数) | ≧ 21 | $\alpha = \frac{\log \frac{I1}{I2}}{\log \frac{V1}{V2}}$ |
| ①Nominal discharge current 8/20us (标称放电电流) | In:20KA | Test Current Waveform 8/20µs*15 Divided into three groups of 5 times each, with 1 minute interval between groups and 30 minutes interval between groups |
| ②Maximum discharge current 8/20us (最大放电电流) | I _{max} : 40KA | Test Current Waveform 8/20µs*1 |
| Operation Temperature Ranger(工作温度范围) | -40~+85 °C | -40~+85 °C |
| Storage Temperature Ranger(储存温度范围) | -40~+105 °C | -40~+105 °C |
| Temperature Coefficient Of Varistor Voltage(温度系数) | -0.05 % / °C max. | $\frac{V_{c85^{\circ}C} - V_{c25^{\circ}C}}{V_{cat25^{\circ}C}} \times \frac{1}{60} \times 100 (\% / ^{\circ}C)$ |

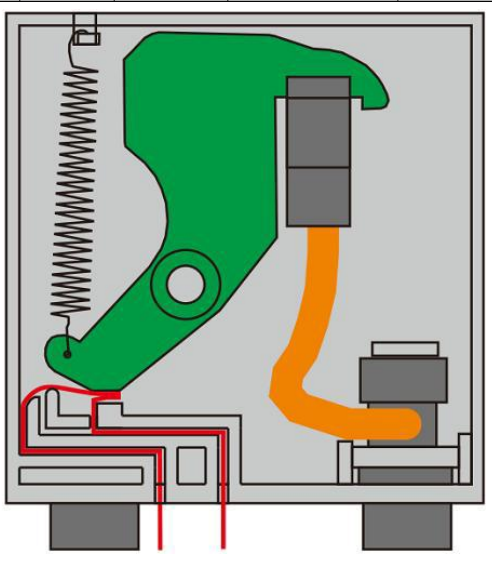
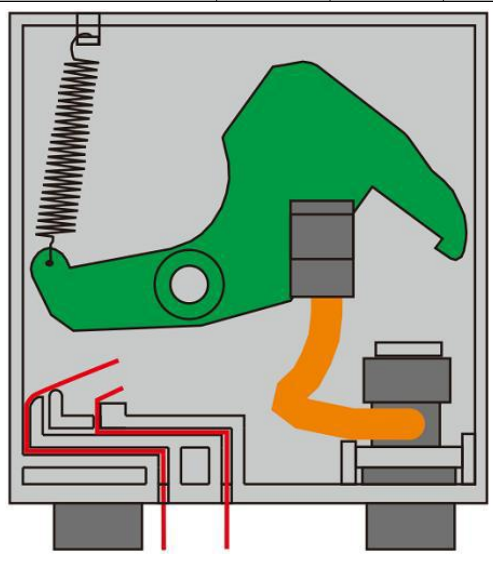
3. Product code rules: (产品编码规则)

Part number code 編碼說明



4.PACKING

| | | | | | | | | | |
|-----|-------------------|--|-------|--|-------|----|-------|--------------|--------|
| 4.1 | Quantity | 12PCS | | | | | | | |
| 4.2 | Packing Dimension |  | |  | | | | | |
| | |  | | | | | | | |
| | | LP | 250mm | Packaging | 12pcs | LC | 220mm | inner Carton | 12PCS |
| | | HP | 22mm | | | HC | 250mm | Packaging | 288PCS |
| | | CP | 180mm | | | WP | 270mm | | |



ShenZhen HuaXingAn Electronics CO.,LTD

SPECIFICATTON FOR APPROVAL

CUSTOMER NAME: SHINHOO Corporation

PRODUCT NAME: TPMOV

HuaXingAn P/N : FSVA33V511KA

Date : 2022-11-12

Customer

Manufacturing Department: _____

Quality Assurance Department: _____

Engineering Department: _____

company seal:

Supplier

Manufacturing Department: Lui Zhi Wei

Quality Assurance Department: Wei Yu

Engineering Department: Chen Tan wang

company seal:

TEL : +86 - 755- 27465585
Email: sales@huaandz.com

Fax : +86 - 755- 27270662
abc0734@126.com

Address:5F, Building C, No.30, Aviation Road, SanWei, XiXiang Street, BaoAn District,ShenZhen City, GuangDong Province,China 518126

Web: www.huaandz.com

| | | | |
|------------------|--------------|--|------|
| Model | FSVA33V511KA | | |
| 1.OUTLINE | | | |
| 1.1 | APPEARANCE | No defect, no black edge metal powder adhesion | |
| 1.2 | DIMENSIONS | DIMENSIONS (mm) | |
| | | L (±2.0) | 43.9 |
| | | W (±2.0) | 42.8 |
| | | W1 (±2.0) | 41 |
| | | T (±2.0) | 16 |
| | | F (±2.0) | 25.5 |
| | | L1 (±2.0) | 19.3 |
| | | Polar surface material: Aluminum | |
| V fastening | | | |

2:Product print:



3: Status of Switch Contacts of Remote Indicator

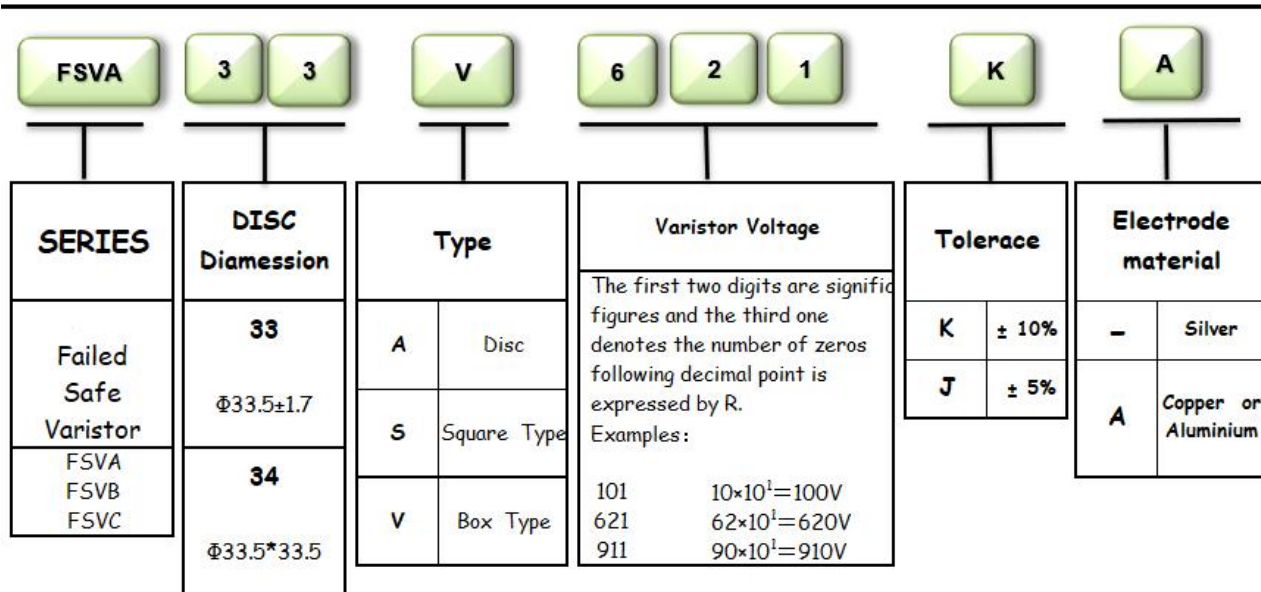
| STATUS OF SWITCH CONTACTS OF REMOTE INDICATOR | |
|---|----------------|
| Normal Status | Failure Status |
| | |

2. Electrical / Thermal Specification:


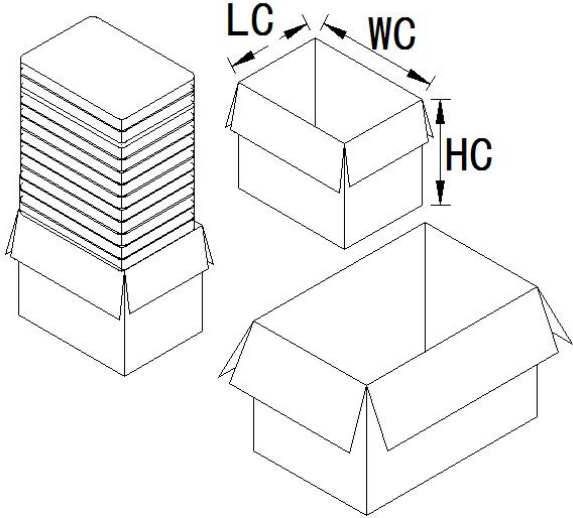
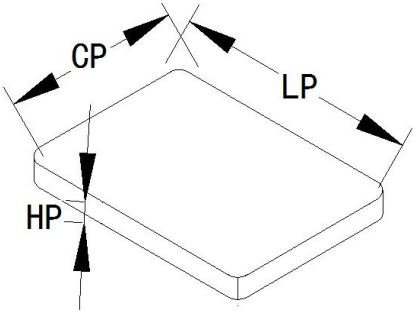
| | | |
|--|-------------------------|--|
| Maximum ac continuous working voltage (最大持续交流工作电压) | 320V | |
| Maximum dc continuous working voltage (最大持续直流工作电压) | 415V | |
| Varistor Voltage (压敏电压) | 459V-561V | V0.1mA □ V1mA ■ |
| Maximum DC Leakage Curren (漏电流) | 15µA | At 75% of Varistor Voltage |
| Nonlinear exponent(α) (非线性系数) | ≧ 21 | $\alpha = \frac{\log \frac{I1}{I2}}{\log \frac{V1}{V2}}$ |
| ①Nominal discharge current 8/20us (标称放电电流) | In:20KA | Test Current Waveform 8/20µs*15 Divided into three groups of 5 times each, with 1 minute interval between groups and 30 minutes interval between groups |
| ②Maximum discharge current 8/20us (最大放电电流) | I _{max} : 40KA | Test Current Waveform 8/20µs*1 |
| Operation Temperature Ranger(工作温度范围) | -40~+85 °C | -40~+85 °C |
| Storage Temperature Ranger(储存温度范围) | -40~+105 °C | -40~+105 °C |
| Temperature Coefficient Of Varistor Voltage(温度系数) | -0.05 % / °C max. | $\frac{V_{c85^{\circ}C} - V_{c25^{\circ}C}}{V_{cat25^{\circ}C}} \times \frac{1}{60} \times 100 (\% / ^{\circ}C)$ |

3. Product code rules: (产品编码规则)

Part number code 編碼說明



4.PACKING

| | | | | | | | | | |
|-----|-------------------|--|-------|--|-------|----|-------|--------------|--------|
| 4.1 | Quantity | 12PCS | | | | | | | |
| 4.2 | Packing Dimension |  | |  | | | | | |
| | |  | | | | | | | |
| | | LP | 250mm | Packaging | 12pcs | LC | 220mm | inner Carton | 12PCS |
| | | HP | 22mm | | | HC | 250mm | Packaging | 288PCS |
| | | CP | 180mm | | | WP | 270mm | | |

