

## 90V Ceramic Gas Discharge Tubes

### 1. Features

- FeatureNon-Radioactive
- ROHS Compliant
- LOW Capacitance
- Extremely small size
- SMD Device
- High insulation resistance
- Fast response-time

### 2. Applications

- PON protection
- PCI Cards protection
- Telephone/Fax/modem protection
- Date/Single line protection
- Consumer electronic
- XDSL Splitter
- Electrostatic charge elimination

### 3. Product characteristics

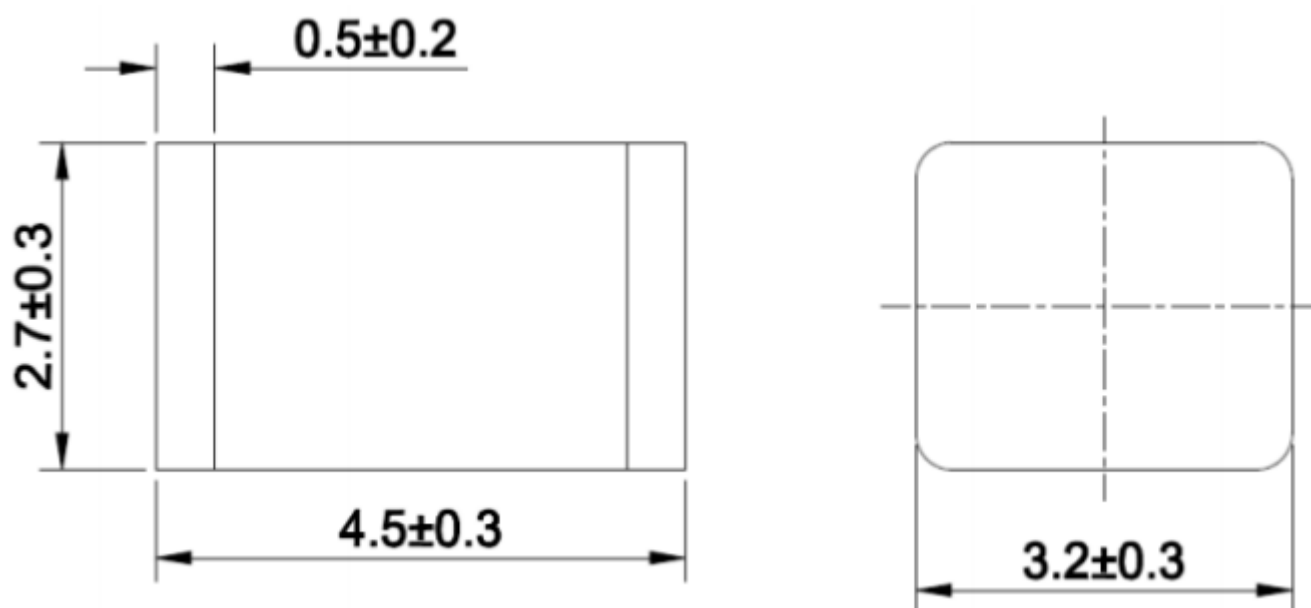
| Part Number     | Physical dimensions | Packing | Quantity per reel | Reel Size |
|-----------------|---------------------|---------|-------------------|-----------|
| 4532-091-LF(ES) | 4.5mm*3.2mm*2.7mm   | Tape    | 2500 PCS          | 13 inches |

Table-1 Ordering information

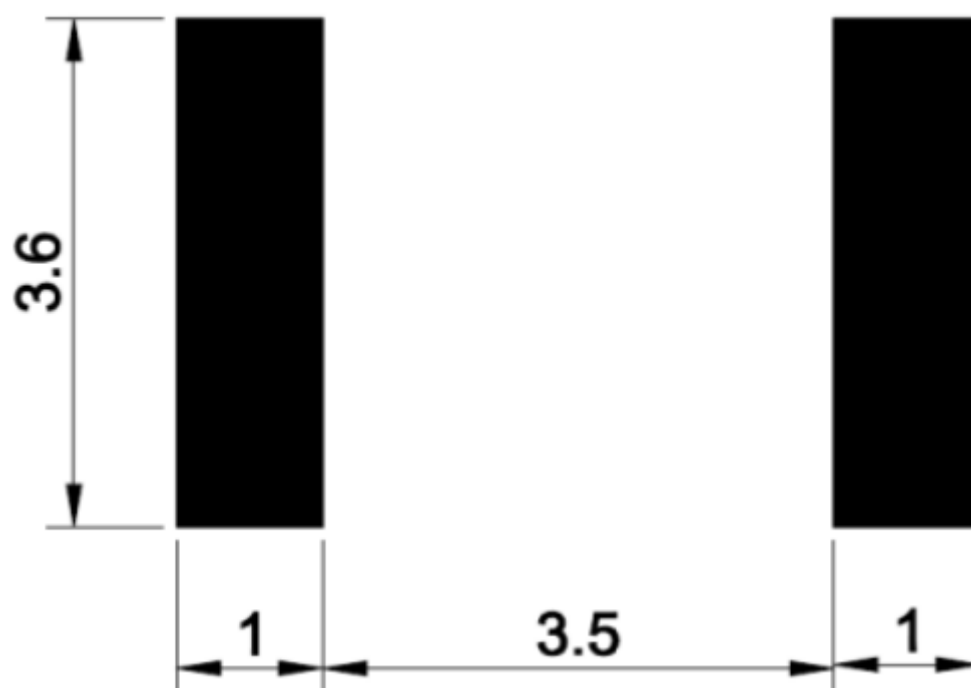
### 4. Electrical Characteristics

| Part number     | DC spark-over<br>Voltage | Impulse spark-over<br>Voltage | Nominal Impulse<br>Discharge current |                | Electrode<br>Capacitance | Insulation<br>resistance | DC<br>Holdover<br>voltage |
|-----------------|--------------------------|-------------------------------|--------------------------------------|----------------|--------------------------|--------------------------|---------------------------|
|                 | 100V/s                   | 1 KV/ $\mu$ s                 | 8/20 $\mu$ s                         | 10/700 $\mu$ s | 1MHz                     |                          |                           |
| 4532-091-LF(ES) | 90V $\pm$ 30%            | <600V                         | 2KA                                  | 4.0KV          | <1.0pF                   | >100M $\Omega$           | 50V                       |

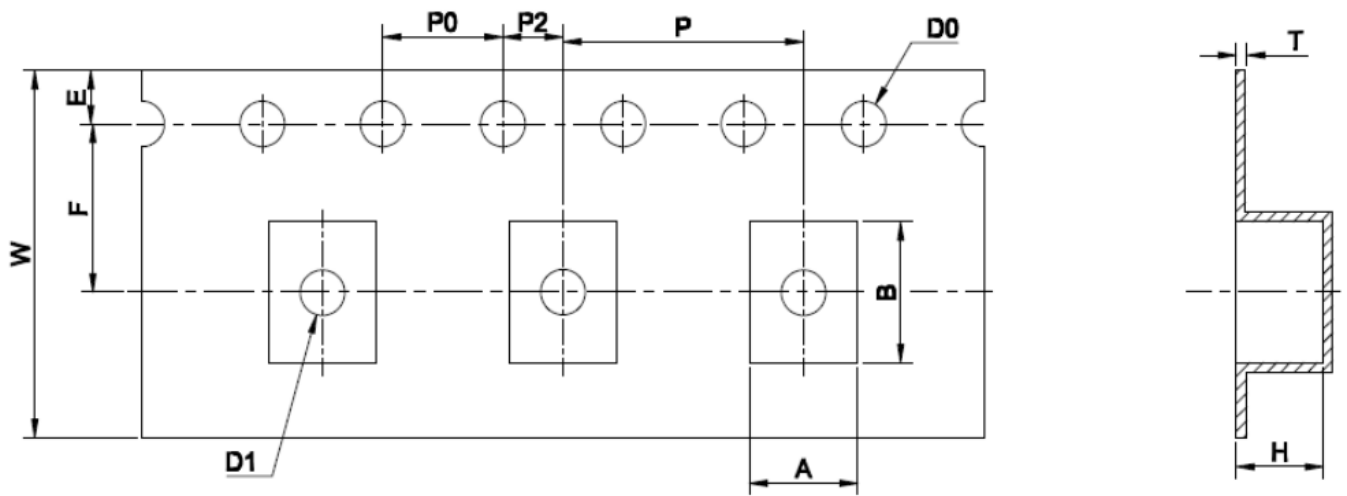
## 5. Mechanical Dimension



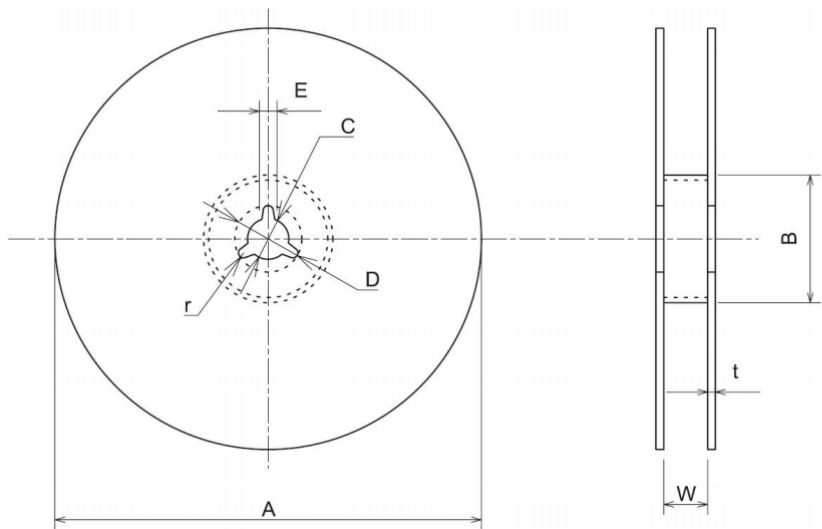
## 6. Recommended Land Pattern(unit:mm)



7. Packaging(unit:mm)



| A              | B              | W              | E         | F         | P       | P <sub>2</sub> |
|----------------|----------------|----------------|-----------|-----------|---------|----------------|
| 3.6±0.1        | 4.6±0.1        | 12±0.2         | 1.75±0.1  | 5.50±0.05 | 8.0±0.1 | 2.0±0.05       |
| P <sub>0</sub> | D <sub>0</sub> | D <sub>1</sub> | T         | H         |         |                |
| 4.0±0.1        | Φ1.5±0.1       | Φ1.5±0.1       | 0.30±0.05 | 2.9±0.1   |         |                |



|   |                                      |
|---|--------------------------------------|
| A | 330±2                                |
| B | 80±0.5                               |
| C | 13±0.5                               |
| D | 21±0.8                               |
| E | 2.0±0.05                             |
| W | 13.5 <sup>+1.5</sup> <sub>-0.5</sub> |
| t | 1.6±0.5                              |
| r | 1                                    |

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