

## ◆ Features

- 1.Compact size for 0603
  - 2.Insulator over coat keeps excellent low and stable leakage current.
  - 3.Quick response time(<1ns).
  - 4.Low Clamping Voltage.
  - 5.Meet IEC 61000-4-2 standard.
- Contact discharge mode:typical  $\pm 8\text{kV}$ ,max  $\pm 15\text{kV}$   
 --Air discharge mode:typical  $\pm 15\text{kV}$ ,max  $\pm 25\text{kV}$



## ◆ Applications

Application for Mother Board,Notebook, cellular Phone,PDA,handheld device,DSC,DV,Scanner,and Set-Top Box etc.

## ◆ How to Order

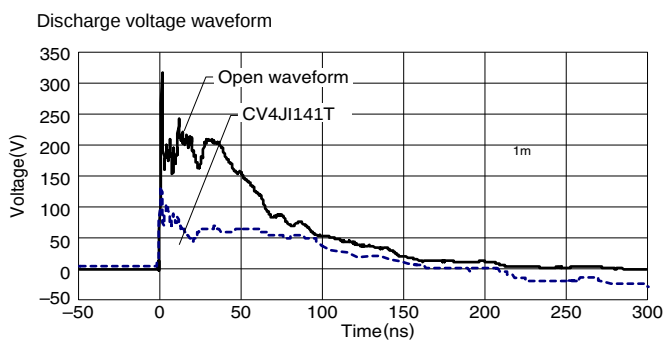
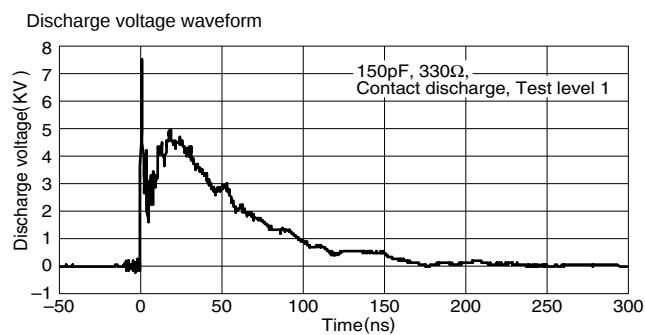
|           |          |           |            |          |
|-----------|----------|-----------|------------|----------|
| <u>CV</u> | <u>4</u> | <u>J1</u> | <u>141</u> | <u>T</u> |
| (1)       | (2)      | (3)       | (4)        | (5)      |

- (1)CV : Series Name  
 (2)Size:0603  
 (3) J1:  $V_{DC} 09V$  Max  
 (4)141:140.0PF  
 (5) Packing: Tape & Reel

## ◆ Specifications

| Part Number | Rated Voltage<br>$V_{DC}$ (V) | $V_{BR}$<br>(1mA)<br>V | $C_{typ}$<br>(1MHz,0V) pF | Leakage<br>Current<br>( $I_L$ ) $\mu A$ | Package<br>quantity |
|-------------|-------------------------------|------------------------|---------------------------|-----------------------------------------|---------------------|
| CV4JI141T   | 9.0                           | 11.0~16.0              | 140.0                     | 20.0                                    | 4,000               |

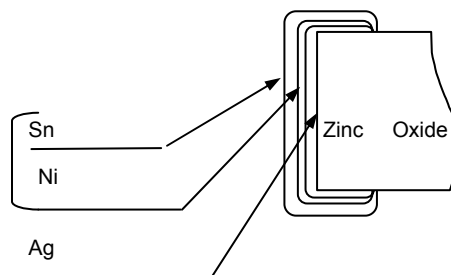
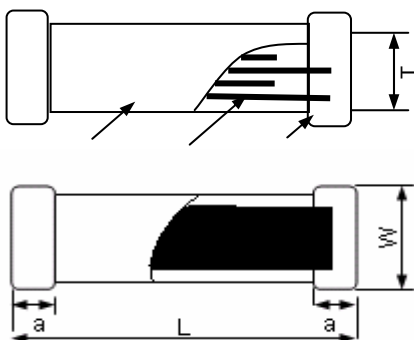
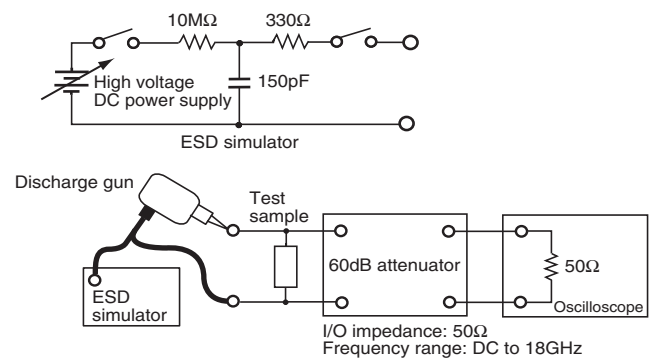
## Electrostatic absorption characteristic



## Current wave parameter [IEC61000-4-2]

| level | ESD Charging voltage<br>(kV) | Discharge 1 peak<br>current<br>(A) | Rise time<br>(ns) |
|-------|------------------------------|------------------------------------|-------------------|
| 1     | 2                            | 7.5                                | 0.7 to 1.0        |
| 2     | 4                            | 15                                 | 0.7 to 1.0        |
| 3     | 6                            | 22.5                               | 0.7 to 1.0        |
| 4     | 8                            | 30                                 | 0.7 to 1.0        |

## The test circuit



ZnO for chip varistor

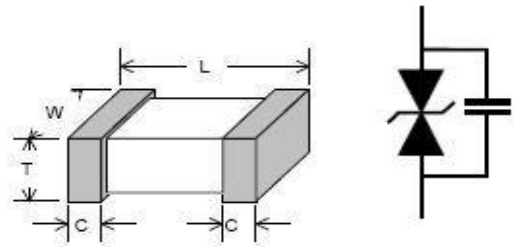
Internal electrode (Ag-Pd)

-1 Terminal electrode: Inside (Ag)

-2 Outside (Electro-plating Ni-Sn)

### ◆ Dimensions Unit:mm

| Size EIA(EIAJ) | (0603)    |
|----------------|-----------|
| L              | 1.60±0.15 |
| W              | 0.80±0.15 |
| T              | 0.80±0.15 |
| C              | 0.30±0.20 |



### ◆ General Technical Data

|                       |                 |
|-----------------------|-----------------|
| Operating Temperature | -55 ~ +125℃     |
| Storage Temperature   | -55~ +125℃      |
| Response Time         | <1 ns           |
| Solderability         | 245±5℃, 3±1sec. |

### ◆ Environmental Performance

| Item                    | Specifications                                                                                                       | Test Condition                       |
|-------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Bias Humidity           | $\Delta V_v / V_v \leq \pm 10\%$                                                                                     | 90%RH, 40℃, Working Voltage, 1000hrs |
| Thermal Shock           |                                                                                                                      | -55℃ to 125℃, 30min.cycle, 5 cycles  |
| Full Load Voltage       |                                                                                                                      | Working Voltage, 125℃, 1000hrs       |
| Solder Leach Resistance | (1) $\Delta V_v / V_v \leq \pm 10\%$<br>(2) $I_L \leq 1nA$ at Working Voltage<br>(3) Solder Wetting Area $\geq 95\%$ | 260±5℃, 10 ±1sec.                    |

### ◆ Package

| Size EIA(EIAJ)                        | 0603  |
|---------------------------------------|-------|
| Standard Packing Quantity(pcs / reel) | 4,000 |