

## Features

- ◆ Lead free type.
- ◆ Compact size for 0402
- ◆ Insulator over coat keeps excellent low and stable leakage current.
- ◆ Quick response time(<1ns).
- ◆ Low Clamping Voltage.
- ◆ Meet IEC 61000-4-2 standard.
  - Contact discharge mode:typical  $\pm 15\text{kv}$
  - Air discharge mode:typical  $\pm 20\text{kv}$



## Applications

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

## Part Numbering

<b>CV</b>	<b>0402</b>	<b>VT6</b>	<b>002</b>	<b>BW</b>
A	B	C	D	E

A:ASIM Serise Name

B:Dimension

C: $V_{DC}$

D:002:0.2PF

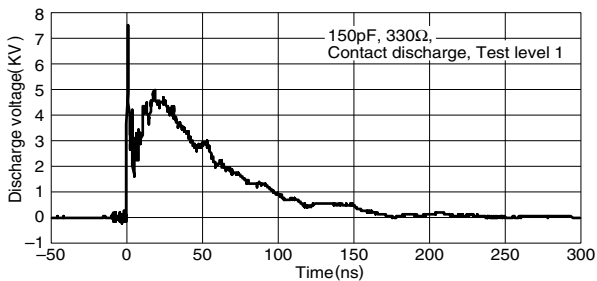
E: Tape

## Specifications

Part Number	Rated Voltage $V_{DC}$ (V)	$V_{BR}$ (V) min	$V_{Clamp}$ (V) typ	$C_j$ (pF) @1MHz, 0V typ	Leakage Current $I_L$ ( $\mu A$ )
CV0402VT6002BW	6.0	52.0	50.0	0.20	10.0
CV0402VT6020T	6.0	52.0	70.0	2.00	10.0
CV0402VT6030T	6.0	30.0	70.0	2.50	3.0
CV0402VT6300T	6.0	8.0	30.0	30.0	20.0
CV0402VT6330T	6.0	18.0	52.0	33.0	3.0
CV0402VT6101T	6.0	11.0	23.0	100.0	20.0
CV0402VT9030T	9.0	20.0	80.0	3.00	3.0
CV0402VT9300T	9.0	11.0	32.0	30.0	20.0

## Electrostatic absorption characteristic

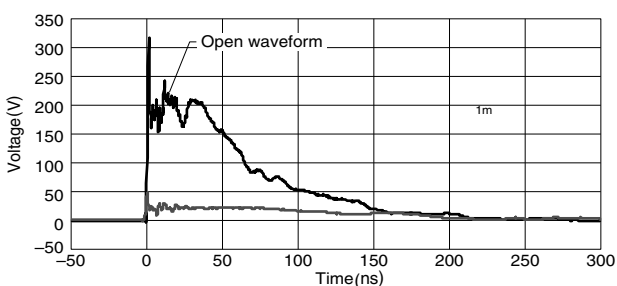
Discharge voltage waveform



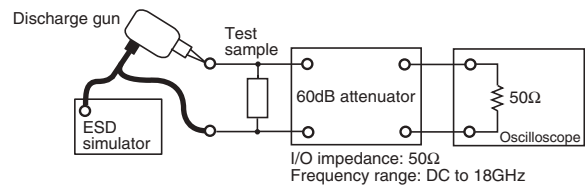
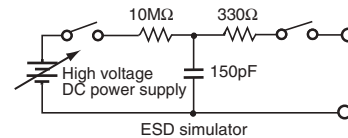
Current wave parameter [IEC61000-4-2]

level	ESD Charging voltage (kV)	Discharge 1 peak current (A)	Rise time (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

Discharge voltage waveform

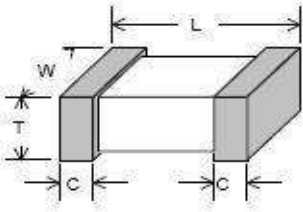


CAPACITANCE vs. FREQUENCY CHARACTERISTICS



IMPEDANCE vs. FREQUENCY CHARACTERISTICS

## Dimensions



Unit:mm

Size EIA(EIAJ)	(0402)
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°C
Storage Temperature	-55~ +125°C
Response Time	<1 ns
Solderability	245±5°C,3±1sec.

## Environmental Performance

Item	Specifications	Test Condition
Bias Humidity	$\Delta Vv/ Vv \leq \pm 10\%$	90%RH,40°C,Working Voltage,1000hrs
Thermal Shock		-55°C to 125°C,30min.cycle,5 cycles
Full Load Voltage		Working Voltage ,125°C,1000hrs
Solder Leach Resistance	(1) $\Delta Vv/ Vv \leq \pm 10\%$ (2)IL≤1nA at Working Voltage (3)Solder Wetting Area≥95%	260±5°C,10 ±1sec.