

◆ Features

1. Lead free type.
2. Compact size for 0402
3. Insulator over coat keeps excellent low and stable leakage current.
4. Quick response time(<1ns).
5. Low Clamping Voltage.
6. Meet IEC 61000-4-2 standard.
 - Contact discharge mode: typical $\pm 8\text{kV}$
 - Air discharge mode: typical $\pm 15\text{kV}$



◆ 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>0402</u>	<u>VS2</u>	<u>100</u>	<u>I</u>
(1)	(2)	(3)	(4)	(5)

- (1) CV : Series Name
- (2) Size: 0402
- (3) VS2: V_{DC} 12V
- (4) 100: 10PF
- (5) Packing: Tape & Reel

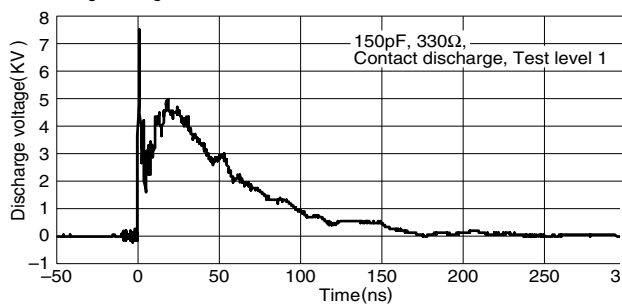
◆ Specifications

CV0402VS2100T

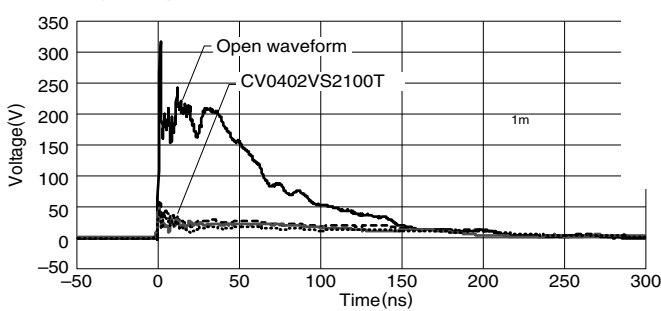
Part Number	R _{Rated Voltage} V _{DC} (V)	Trigger voltage ESD (V)	V _{Clamp,max} ESD (V)	C _j (1MHz, 1V) pF	Leakage Current (I _L) μA	Package quantity
CV0402VS2100T	12.0	30-45	72	9-12	2.0	10,000

Electrostatic absorption characteristic

Discharge voltage waveform

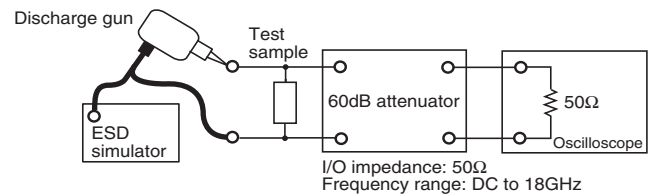
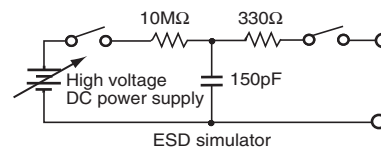


Discharge voltage waveform



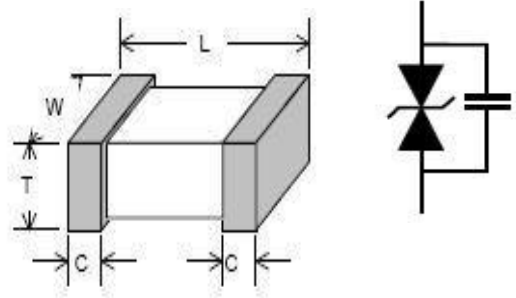
Current wave parameter [IEC61000-4-2]

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



◆ Dimensions Unit:mm

Size EIA(EIAJ)	(0402)
L	0.88±0.10
W	0.47±0.10
T	0.47±0.10
C	0.25±0.15



◆ 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) $I_L \leq 1nA$ at Working Voltage (3)Solder Wetting Area $\geq 95\%$	260±5°C, 10 ±1sec.

◆ Package

Size EIA(EIAJ)	0402
Standard Packing Quantity(pcs / reel)	10,000