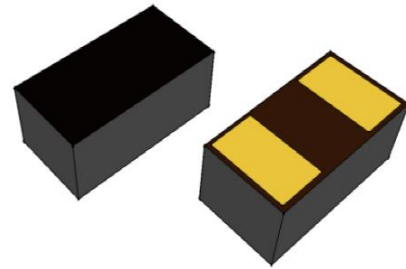




Features

- The best ESD protection for high speed ,high frequency and low voltage applications
- RoHS compliant and halogen free
- Ultra-low capacitance : $C_j=0.05\text{pF}$ (typ.)
- Low clamping voltage according to IEC61000-4-2
- Fast response time
- IEC61000-4-2 (ESD):Contact $\pm 8\text{kV}$ (typ.), $\pm 15\text{kV}$ (max.)
- IEC61000-4-2 (ESD):Air $\pm 15\text{kV}$ (typ.), $\pm 25\text{kV}$ (max.)
- Surface mount



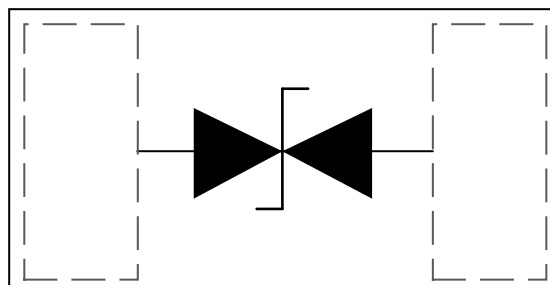
Applications

- USB2.0 and USB3.0
- Ultra-high-speed data line
- Sensitive interfaces lines
- High Definition Multi-media Interface(HDMI)
- Antenna applications
- 10/100/1000Mbit/s Ethernet

Mechanical Data

- Molding compound flammability rating: UL94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

Schematic & PIN Configuration



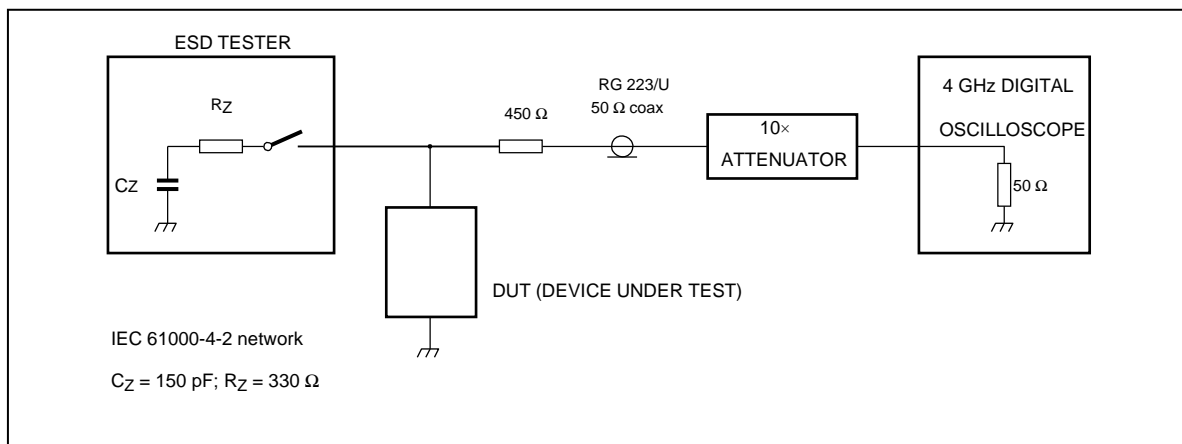
Absolute Maximum Rating

Rating	Symbol	Value	Units
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	25 15	kV
Lead Soldering Temperature	T_L	260(10seconds)	°C
Junction Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{stg}	-55 to + 125	°C

Electrical Characteristics

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Continuous Operating Voltage	V_{DC}				5	V
Reverse Leakage Current	I_R	$V_{DC}=5V, T=25^{\circ}C$		0.01	0.1	μA
Clamping Voltage	V_T	IEC61000-4-2 8kVcontact discharge		300		V
Clamping Voltage	V_C	IEC61000-4-2 8kVcontact discharge		35		V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		0.05		pF

ESD Clamping Test





ESD Clamping Test Waveforms

Figure1: ESD pulse waveform according to IEC 61000-4-2

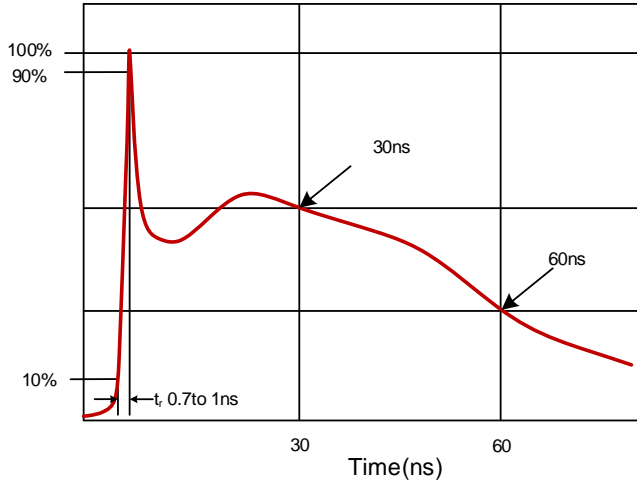
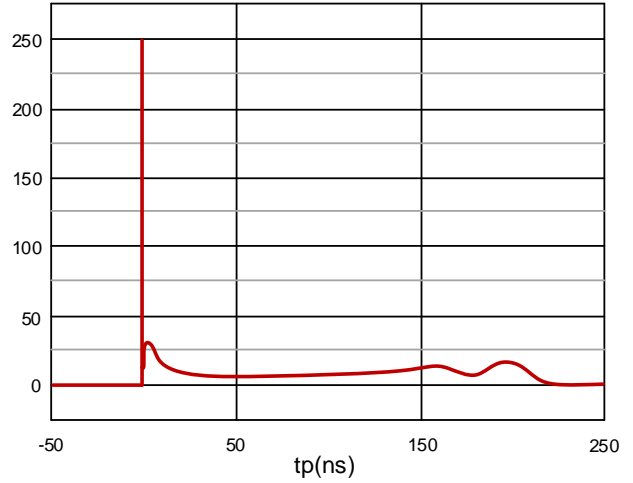
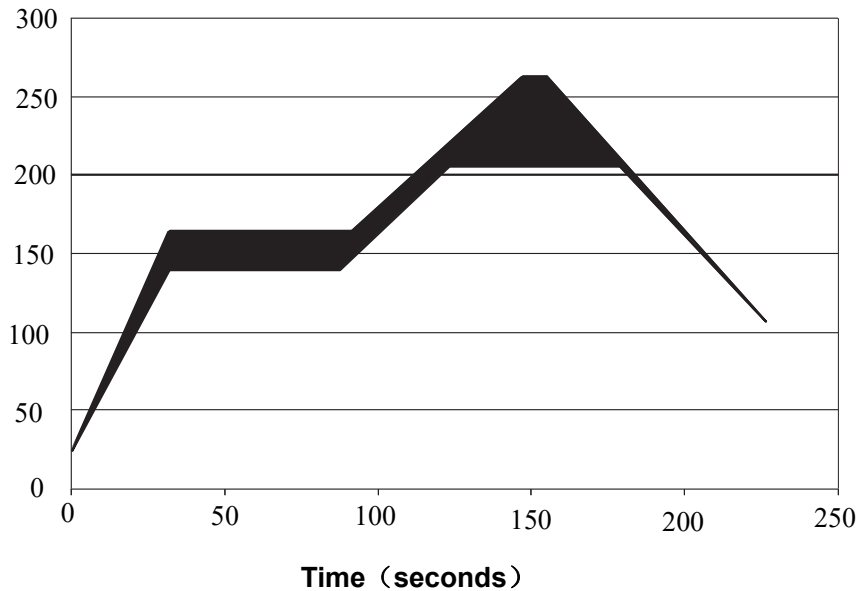


Figure 2: 8kV Contact ESD pulse clamping per IEC61000-4-2



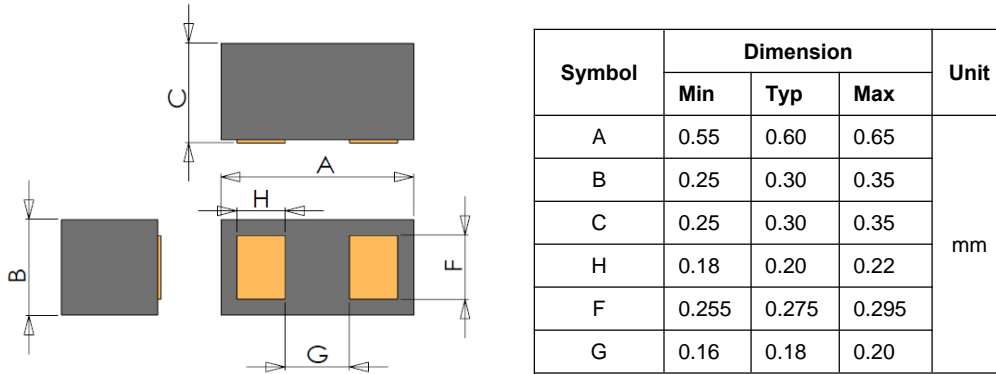
Solder Reflow Recommendations

Temperatures (°C)

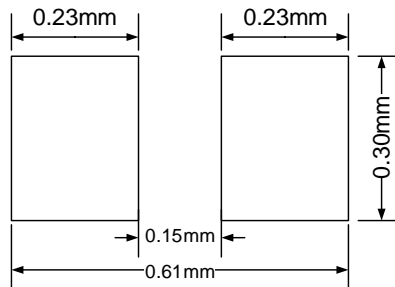




Outline Drawing



Land Pattern *



* This Land Pattern is For Reference Purposes Only

Ordering Information

Part number	Package	Type	Reel size	MOQ
PESD0201V05	0201	T/R	7 inch	15k/reel