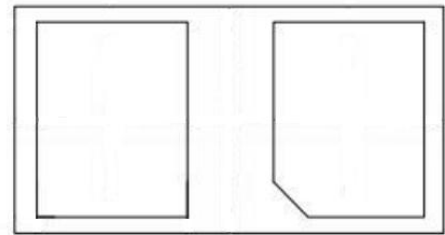
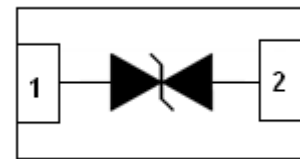


### FEATURES:

- ✧ Protects one bi-directional I/O line
- ✧ Low capacitance: 0.4pF(Max)
- ✧ Low operating voltage: 5.0V
- ✧ Compliant to Halogen-free



DFN0603



PIN Configuration

### MAIN APPLICATIONS

- ✧ Smart Phone and Tablet PC
- ✧ TV and Set Top Boxts
- ✧ Wearable Devices
- ✧ PDA

### PROTECTION SOLUTION TO MEET

- ✧ IEC61000-4-2 (ESD) ±25kV (Air), ±20kV (Contact)
- ✧ IEC61000-4-5 (Lightning) 4A (8/20µs)

### MECHANICAL CHARACTERISTICS

- ✧ Package :DFN0603
- ✧ Molding Compound Flammability Rating : UL 94V-O
- ✧ Lead Finish : Lead Free
- ✧ Marking Code : H

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C, unless otherwise noted)

Parameter	Symbol	Value	Unit
Storage temperature range	T <sub>stg</sub>	-55 to +150	°C
Operating junction temperature range	T <sub>j</sub>	-55 to +125	°C
Peak pulse power dissipation on 8/20 µs waveform	P <sub>PP</sub>	80	W
Peak pulse current(8/20µs)	I <sub>PP</sub>	4	A
ESD per IEC 61000-4-2 (Air)	V <sub>ESD</sub>	+/- 25	kV
ESD per IEC 61000-4-2 (Contact)		+/- 20	

### ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ , unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Reverse Working Voltage	$V_R$				5.0	V
Reverse Breakdown Voltage	$V_{BR}$	$I_R = 1\text{mA}$	6.5	7.5	9.0	V
Reverse Leakage Current	$I_R$	$V_R = 5\text{V}$			0.1	$\mu\text{A}$
Clamping Voltage	$V_C$	$I_{PP} = 1\text{A}$ , $t_p = 8/20\mu\text{s}$		10		V
		$I_{PP} = 4\text{A}$ , $t_p = 8/20\mu\text{s}$		18	20	V
Junction Capacitance	$C_J$	$V_R = 0\text{V}$ , $f = 1\text{MHz}$		0.25	0.4	pF

### Typical Performance Characteristics

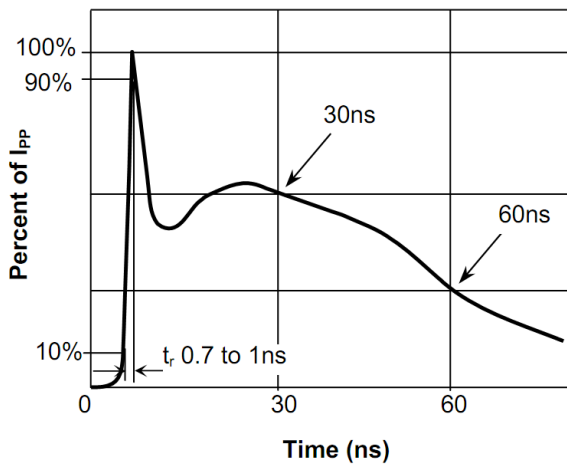


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

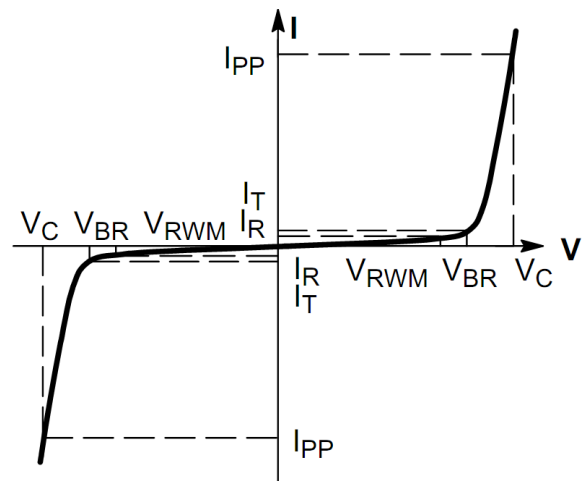


Fig.2 Bidirectional Characteristics

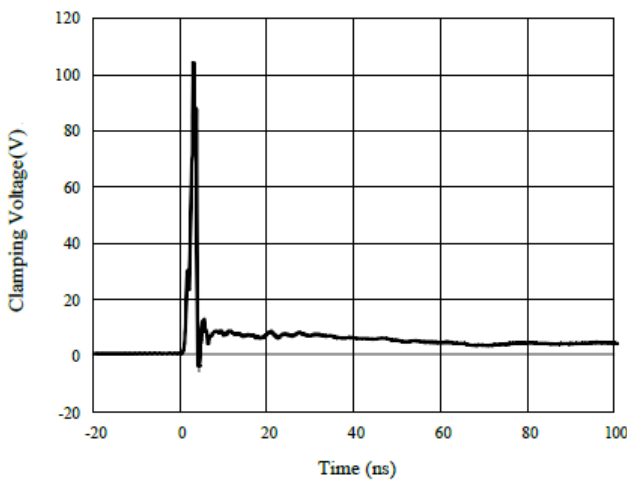


Fig.3 Clamping Voltage at IEC61000-4-2  
+8kV Pulse Waveform

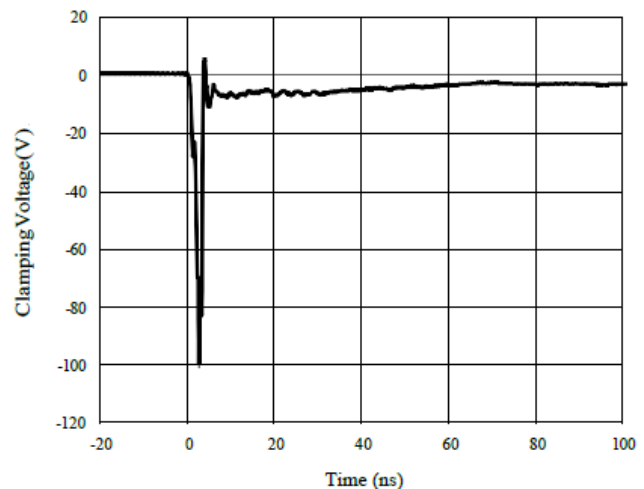
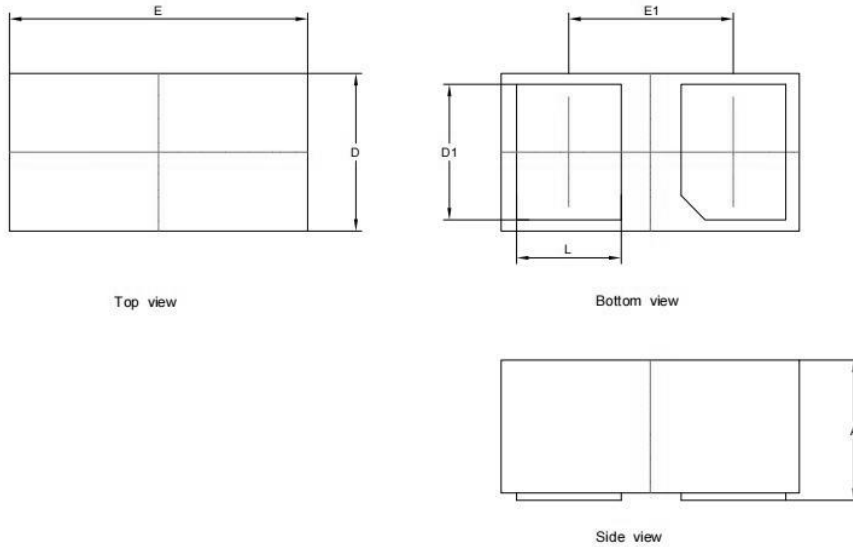


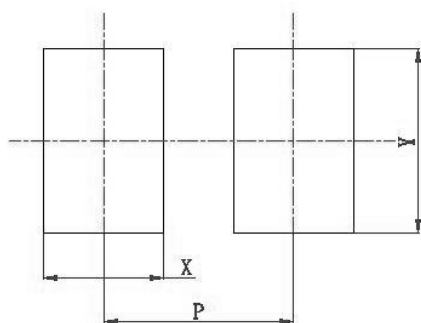
Fig.4 Clamping Voltage at IEC61000-4-2  
-8kV Pulse Waveform

## PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		
	Min	Typical	Max
<b>A</b>	0.28	0.30	0.32
<b>D</b>	0.25	0.30	0.35
<b>E</b>	0.55	0.60	0.65
<b>D1</b>	0.20	0.25	0.30
<b>E1</b>	0.31	0.37	0.43
<b>L</b>	0.14	0.19	0.24

## SUGGESTED LAND PATTERN



Symbol	Dimension in Millimeters
	typ
<b>X</b>	(0.32)
<b>Y</b>	(0.40)
<b>P</b>	(0.47)