

Description

This is working voltage 3.3V ,Bi-directional,ESD protection diode in a DFN1006 package.

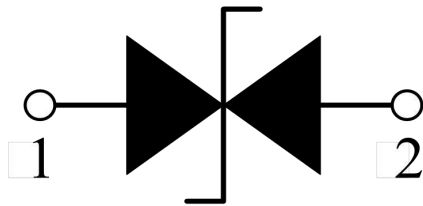
Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

Features

- Capacitance: 10pF(typ.)
- Reverse Working Voltage:3.3V
- IEC 61000-4-2 (ESD Air): $\pm 30\text{KV}$
- IEC 61000-4-2 (ESD Contact): $\pm 30\text{KV}$
- IEC 61000-4-5 (Lightning 8/20 μs): 8.5A

Schematic Diagram& Pinning



Marking

See Marking Instructions.

Limiting Values(TA = 25 ° C, unless otherwise specified)

Symbol	Parameter	Conditions	Min	Max	Unit
VESD	Electrostatic Discharge Voltage	IEC 61000-4-2; Contact Discharge	-	±30	kV
		IEC 61000-4-2; Air Discharge	-	±30	kV
PPP	Peak Pulse Power	tP = 8/20 μs	-	72	W
IPPM	Rated Peak Pulse Current	tP = 8/20 μs	-	8.5	A
TA	Ambient Temperature Range	-	-55	125	°C
Tstg	Storage Temperature Range	-	-55	150	°C

Electrical Characteristics (Ta=25°C)

Symbol	Parameter	Conditions	Min	Typ.	Max	Unit
VRWM	Reverse Working Voltage	TA = 25 °C	-	-	3.3	V
VBR	Breakdown Voltage	IR = 1mA; TA = 25 °C	5.0	5.5	6.0	V
IR	Reverse Leakage Current	VRWM = 3.3V; TA = 25 °C	-	-	0.1	uA
VC	Clamping Voltage	IPP= 1A, tP =8/20μs	-	-	5	V
		IPP=8.5A, tP =8/20μs	-	-	8.5	V
CJ	Junction Capacitance	VR = 0V, f = 1 MHz	-	10	-	pF

Typical Characteristics

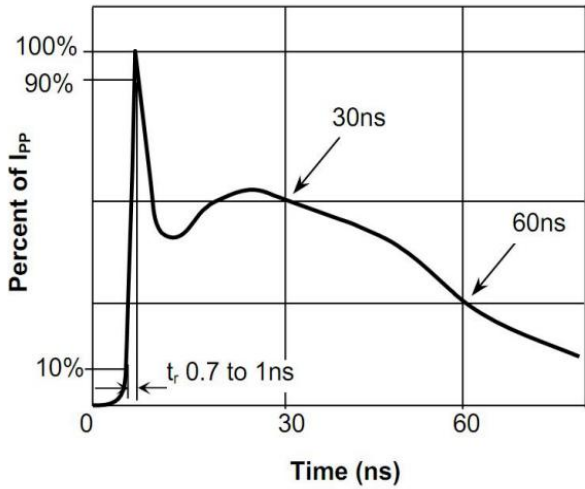


Fig.1 Pulse Waveform-ESD (IEC61000-4-2)

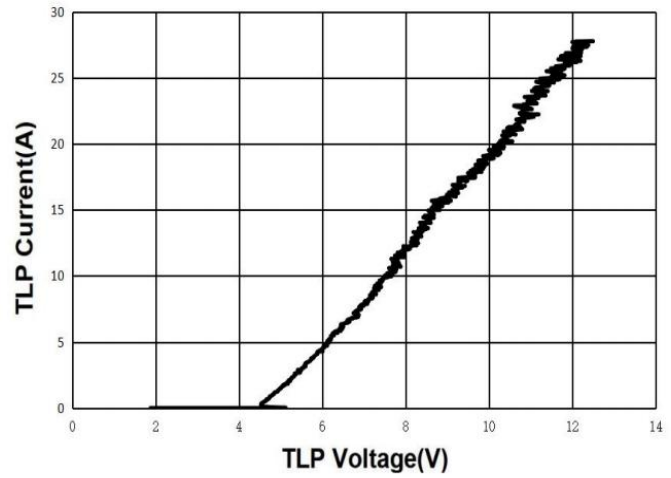


Fig.2 Transmission Line Pulse (TLP)

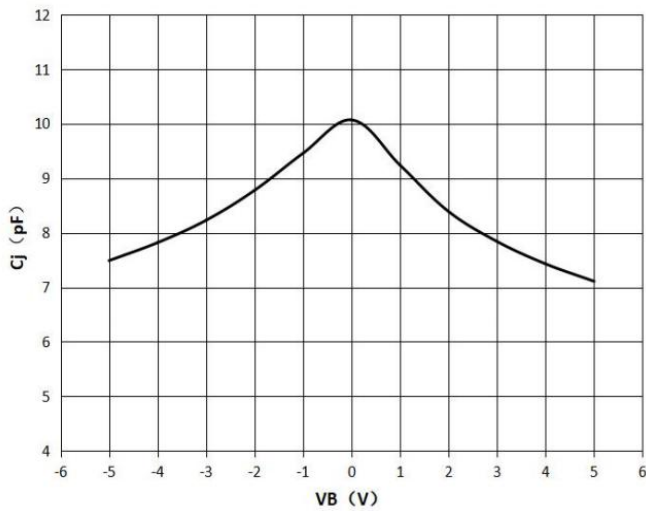


Fig.3 Capacitance vs. Revers Voltage

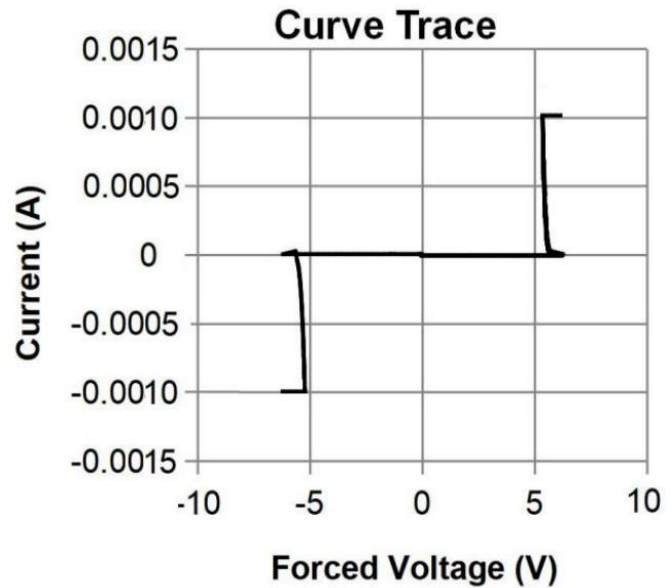
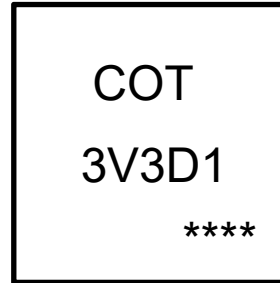


Fig.4 IV Curve (Forward Voltage)

Marking Information

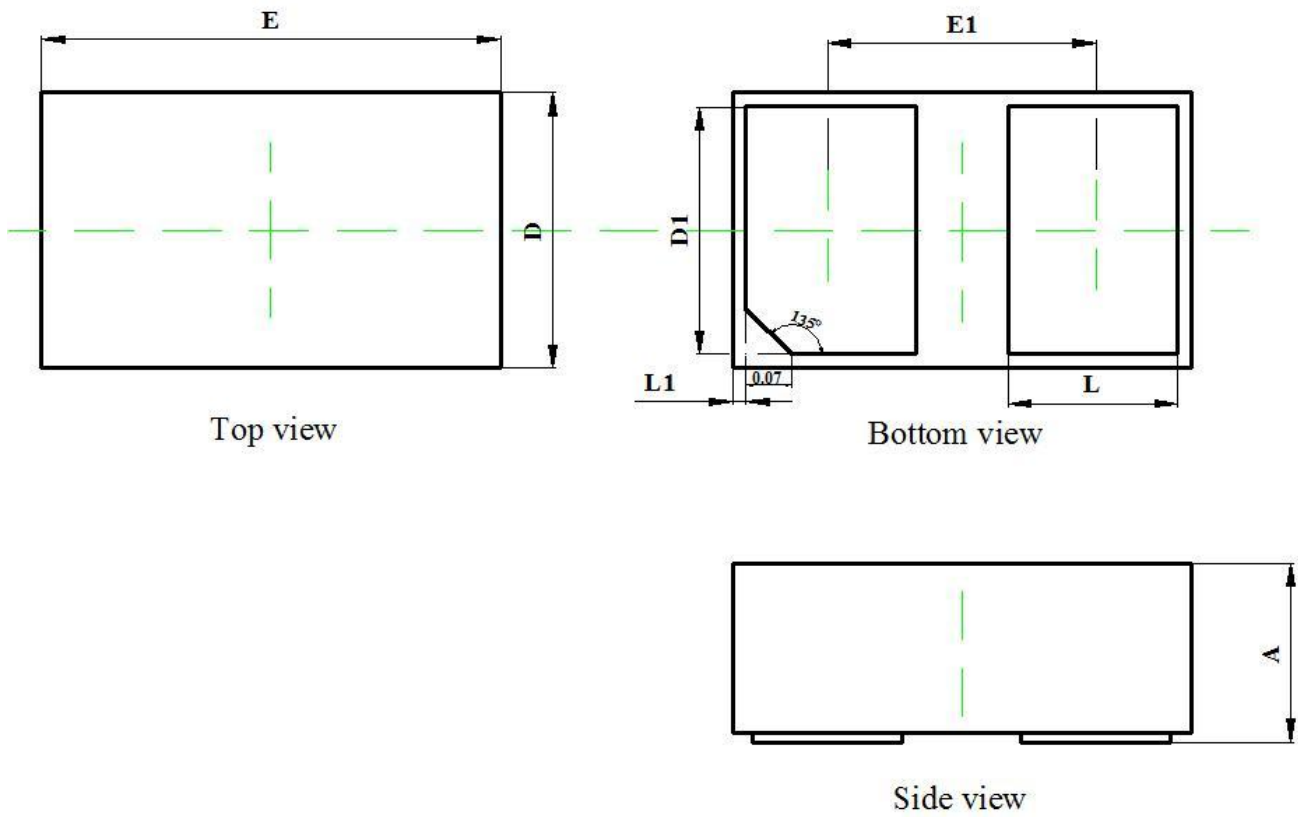


- Note:
- COT: Company Logo
 - 3V3D1: Product Type.
 - ****: Lot No. Code, code change with Lot No.

Order Information

Type	Package	Size (mm)	Delivery Form	Delivery Quantity
CTESD3V3D1B2ZP	DFN1006	1.00x0.60x0.37	7" T&R	10,000

Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.350	0.450	0.014	0.018
D	0.550	0.650	0.022	0.026
E	0.950	1.050	0.037	0.041
D1	0.420	0.520	0.017	0.020
E1	0.550	0.650	0.022	0.026
L	0.270	0.370	0.011	0.015
L1	0.000	0.100	0.000	0.004