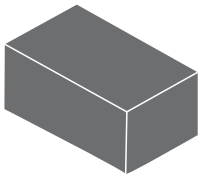
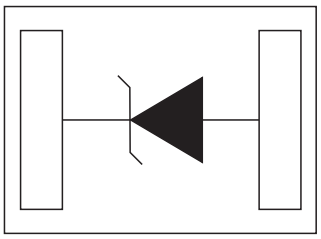
Electro-Static Discharge
TESD12CU
Uni-direction ESD Protection Diode

DFN1006



Pin Configuration



Features

- Uni-directional ESD protection of one line
- Reverse stand−off voltage: 12V
- Low reverse clamping voltage
- Low leakage current
- Fast response time

IEC Compatibility

- IEC61000-4-2 (ESD) ±25kV (air), ±25kV (contact)
- IEC61000-4-5(Lightning) 9A(8/20μs)

Applications

- Computers and peripherals
- Digital Cameras
- Audio and video equipment
- Cellular handsets and accessories
- Portable electronics
- Mp3 Players
- Other electronics equipments communi- cation systems

Mechanical Characteristics

- JEDEC DFN1006 Package
- Molding Compound Flammability Rating : UL 94V-O
- Weight 0.5 Millgrams (Approximate)
- Quantity Per Reel : 10,000pcs
- Reel Size : 7 inch
- Lead Finish : Lead Free

Maximum Ratings(T_A=25℃ unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power	P_{PP}	225	Watts
Lead Solder Temperature – Maximum (10 Second Duration)	T_L	260	℃
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{STG}	-55~150	℃

Electrical Characteristics(T_A=25℃ unless otherwise specified)

TUSD12CU(Marking: .C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}				12	V
Breakdown Voltage	V_{BR}	I_T=1mA	13.5		16.5	V
Clamping Voltage	V_C	I_{PP}=9A,tp=8/20μs			25	V
Forward Voltage	V_F	I_F=10mA			0.9	V
Reverse Leakage Current	I_R	@V_{RWM}			1	μA
Junction Capacitance	C_J	0Vdc,f=1MHz Between I/O Pins and GND		48		pF

Tipical Characteristics

Fig.1 Forward Characteristics

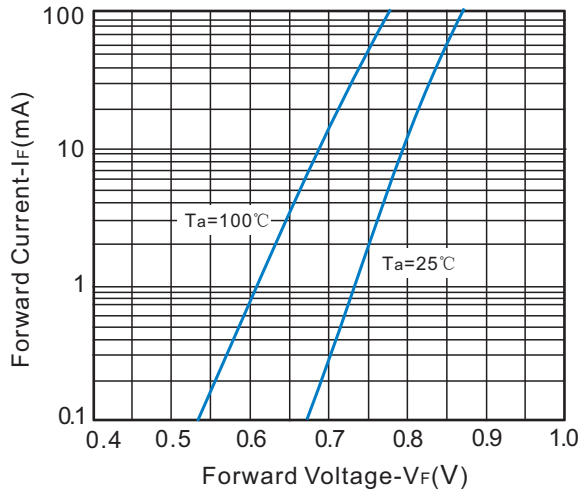
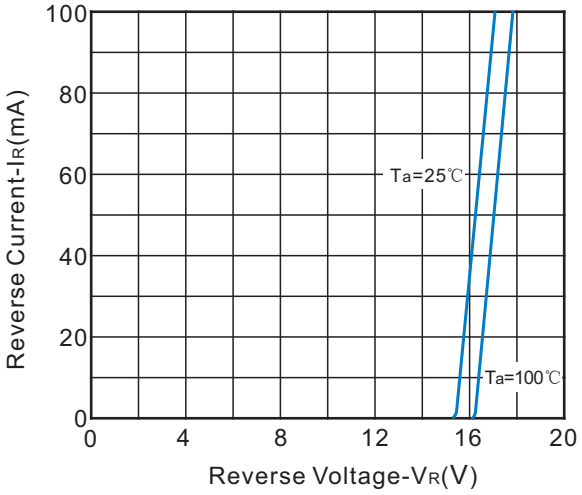


Fig.2 Reverse Characteristics



Tipical Characteristics

Fig.3 V_C-I_{PP}

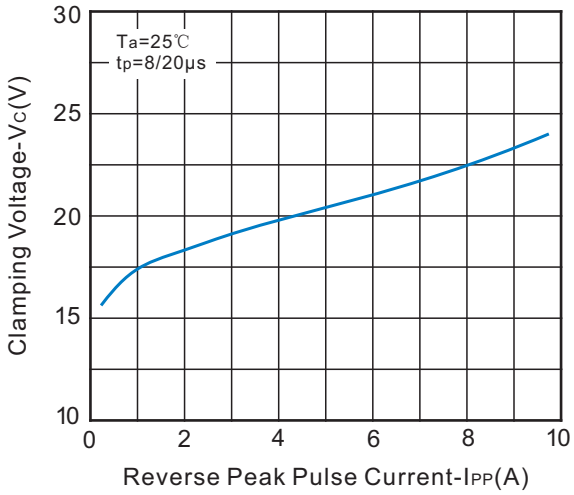
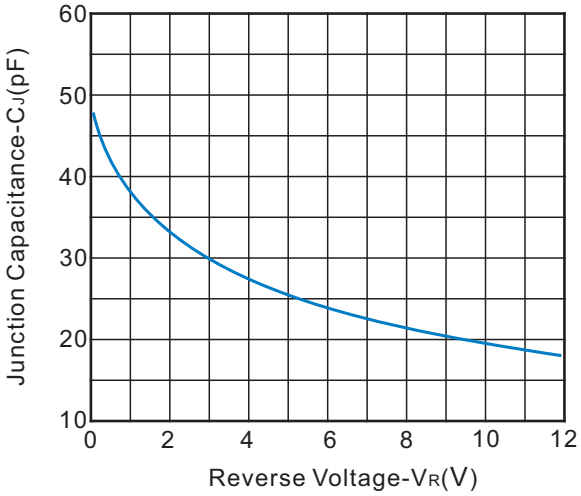
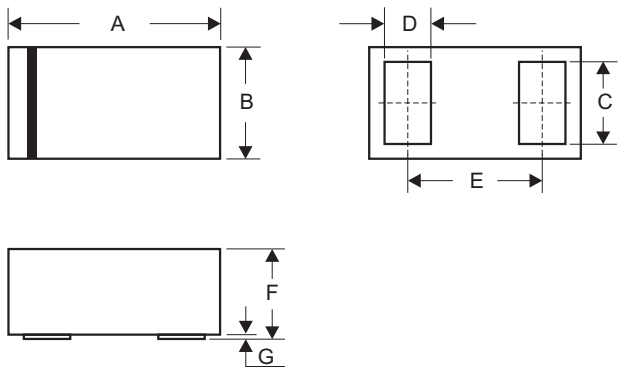


Fig.4 Capacitance Characteristics



Dimensions(DFN1006)

DFN1006



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.95	1.07	0.037	0.042
B	0.55	0.65	0.022	0.026
C	0.45	0.55	0.017	0.022
D	0.20	0.30	0.008	0.012
E	0.65BSC		0.026BSC	
F	0.40	0.55	0.015	0.022
G	0.00	0.10	0.000	0.004

Recommended Mounting Pad Layout

