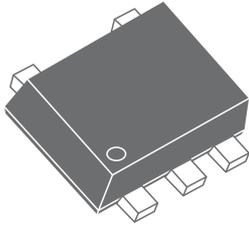
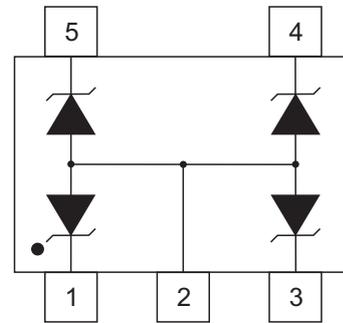


Electro-Static Discharge TESD05N4U Quad-Direction TVS Diode

SOT-553



Pin Configuration



Features

- Uni-directional ESD protection of four lines
- Low capacitance: 10pF(Typ)
- Low reverse stand-off voltage: 5V
- Low reverse clamping voltage
- Low leakage current
- Excellent package: 1.6mm×1.2mm×0.6mm
- Fast response time
- IEC 61000-4-2 Level 3 ESD protection

IEC Compatibility

- IEC61000-4-2 (ESD) ±10kV (air), ±10kV (contact)
- IEC61000-4-5 (Lightning) 2.5A (8/20μs)

Applications

- Computers and peripherals
- Audio and video equipment
- Subscriber Identity Module(SIM) card protection
- Cellular handsets and accessories
- Portable electronics
- Other electronics equipments communication systems

Mechanical Characteristics

- JEDEC SOT-553 Package
- Molding Compound Flammability Rating:UL 94V-O
- Quantity Per Reel:3000pcs
- Reel Size:7 inch
- Lead Finish:Lead Free

Maximum Ratings($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Units
Peak Pulse Power($t_p=8/20\mu\text{s}$)	P_{PP}	28	Watts
Lead Soldering Temperature	T_L	260(10 sec.)	$^{\circ}\text{C}$
Junction Temperature	T_J	-150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~150	$^{\circ}\text{C}$

Electrical Characteristics($T_A=25^{\circ}\text{C}$ unless otherwise specified)

TESD05N4U(Marking:5H)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	V_{RWM}				5	V
Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6.0		7.2	V
Reverse Leakage Current	I_R	@ V_{RWM}			1	μA
Forward Voltage	V_F	$I_F=10\text{mA}$			0.9	V
Clamping Voltage	V_C	$I_{PP}=2.5\text{A}, t_p=8/20\mu\text{s}$			11	V
Junction Capacitance	$C_{I/O}$	Pin capacitance to GND, $V_{DC}=0\text{V}, f=1\text{MHz}$		10		pF

Typical Characteristics

Fig.1 Forward Characteristics

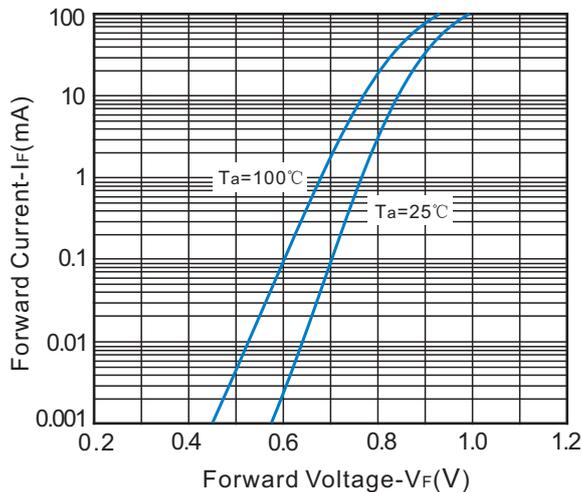
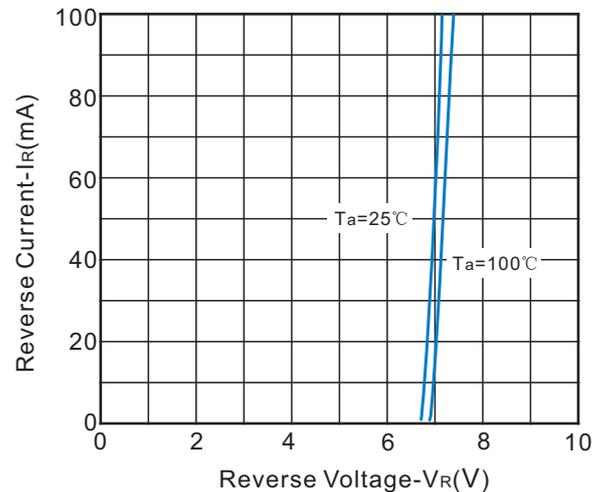


Fig.2 Reverse Characteristics



Typical Characteristics

Fig.3 V_C - I_{PP}

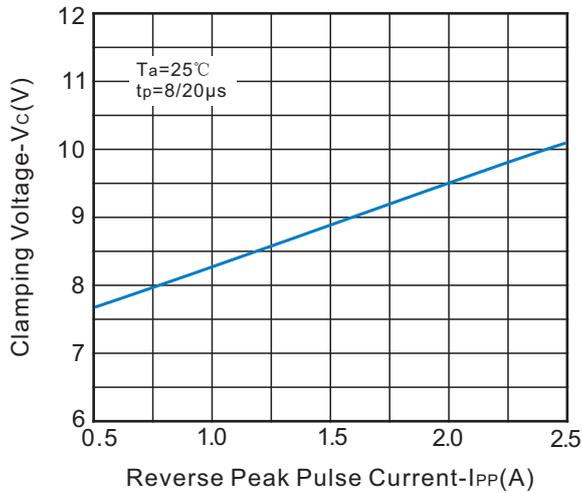
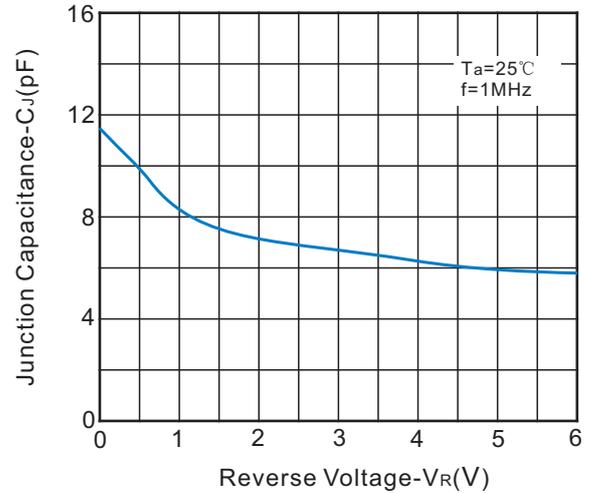
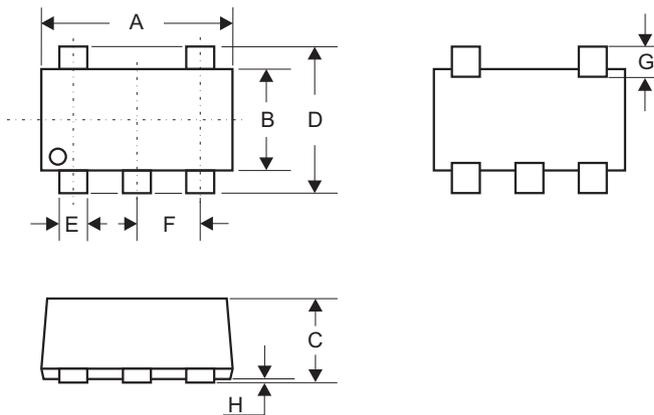


Fig.4 Capacitance Characteristics



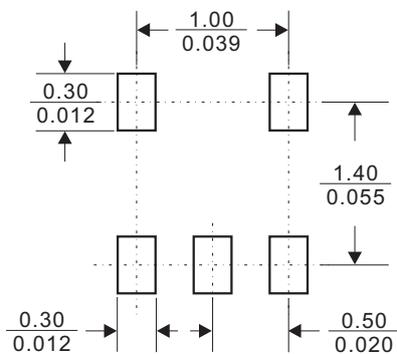
Dimensions(SOT-553)

SOT-553



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	1.50	1.70	0.059	0.067
B	1.10	1.30	0.043	0.051
C	0.52	0.60	0.020	0.024
D	1.50	1.70	0.059	0.067
E	0.17	0.27	0.007	0.011
F	0.45	0.55	0.018	0.022
G	0.20	0.40	0.008	0.016
H	0.00	0.050	0.000	0.002

Recommended Mounting Pad Layout



Dimensions in ($\frac{\text{millimeters}}{\text{inches}}$)