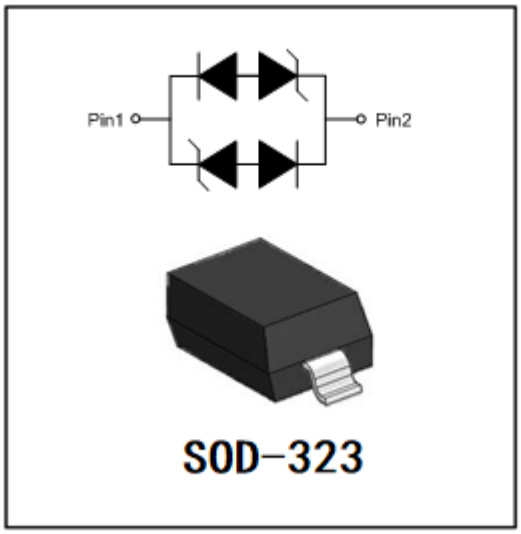
1-Line Low Capacitance Bi-directional TVS Diode



Features

- ●350W peak pulse power (8/20μs)
- ●Ultra low capacitance: 1pF typical
- ●Ultra low leakage: nA level
- ●Operating voltage:12V
- ●Low clamping voltage
- ●Protects one power line or data line
- ●RoHS Compliant

Mechanical Characteristics

- ●Package: SOD-323
- ●Moisture Sensitivity: Level 1 per J-STD-020
- ●Case Material: “Green” Molding Compound
- ●Marking Information: See Below



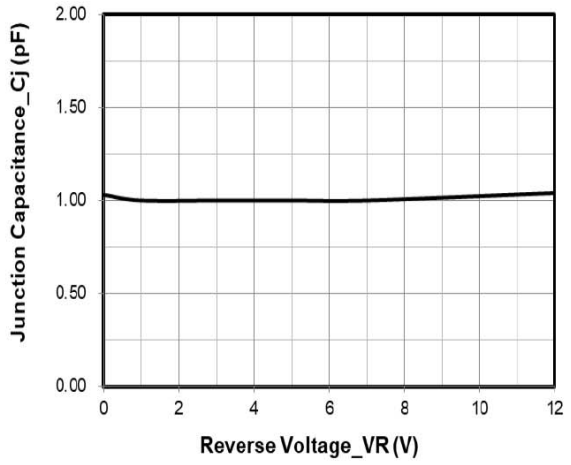
■Maximum Ratings

PARAMETER	SYMBOL	VALUE	UNIT
Peak Pulse Power (8/20μs)	Ppk	350	W
Peak Pulse Current (8/20μs)	I_{PP}	14	A
ESD per IEC 61000−4−2 (Air) ESD per IEC 61000−4−2 (Contact)	V_{ESD}	±30 ±30	KV
Operating Temperature Range	T_J	−55 to +125	℃
Storage Temperature Range	Tstg	−55 to +150	℃

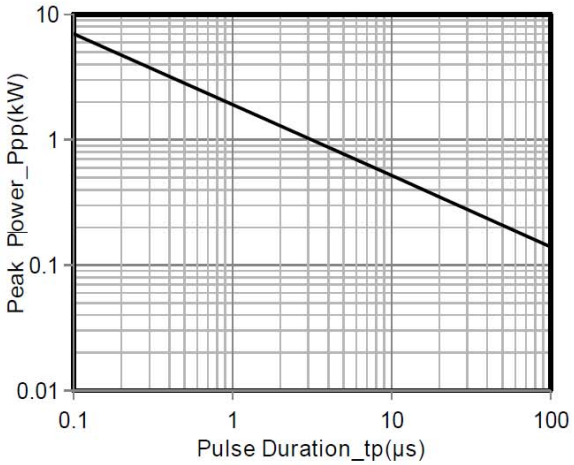
■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Reverse Working Voltage	V_{RWM}	V				12
Breakdown Voltage	V_{BR}	V	I_T = 1mA	13.3		
Reverse Leakage Current	I_R	μA	V_{RWM} = 12V			0.2
Clamping Voltage	V_C	V	I_{PP} = 1A (8/20μs pulse)			18
Clamping Voltage	V_C	V	I_{PP} = 14A (8/20μs pulse)			25
Junction Capacitance	C_J	pF	V_R = 0V, f = 1MHz		1	1.5

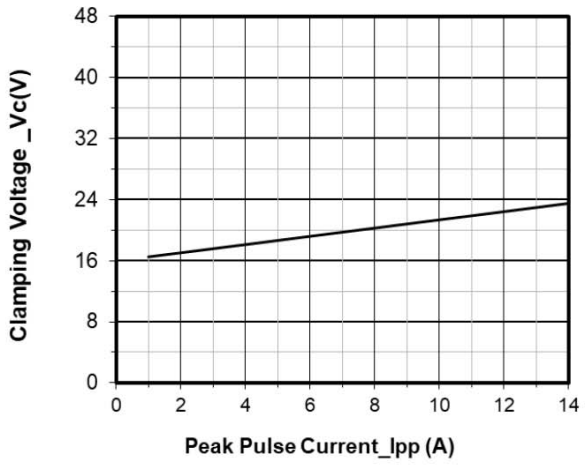
■ Characteristics (Typical)



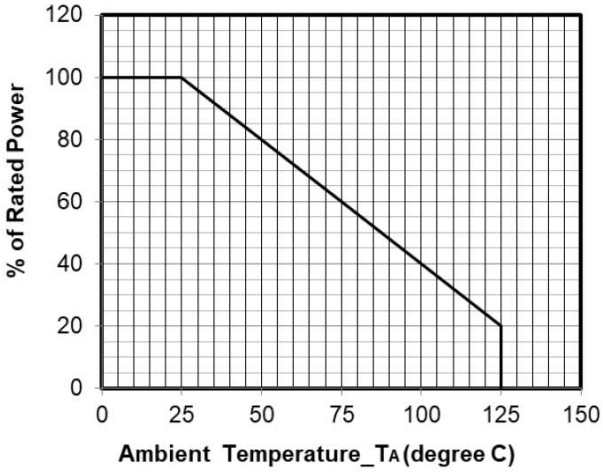
Junction Capacitance vs. Reverse Voltage



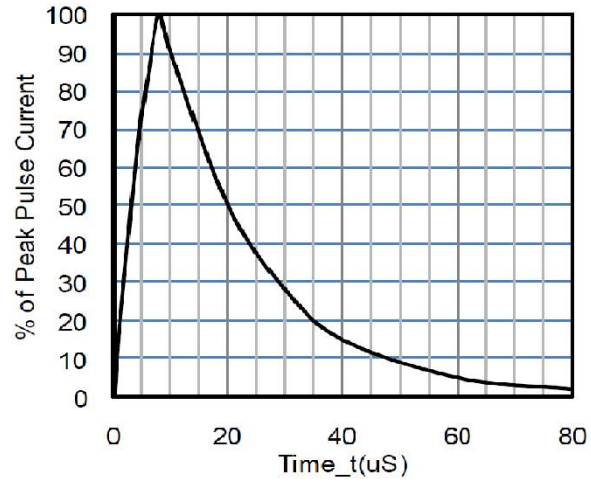
Peak Pulse Power vs. Pulse Time



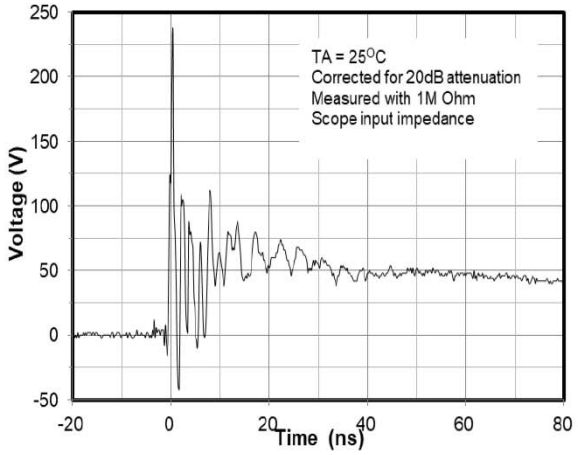
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



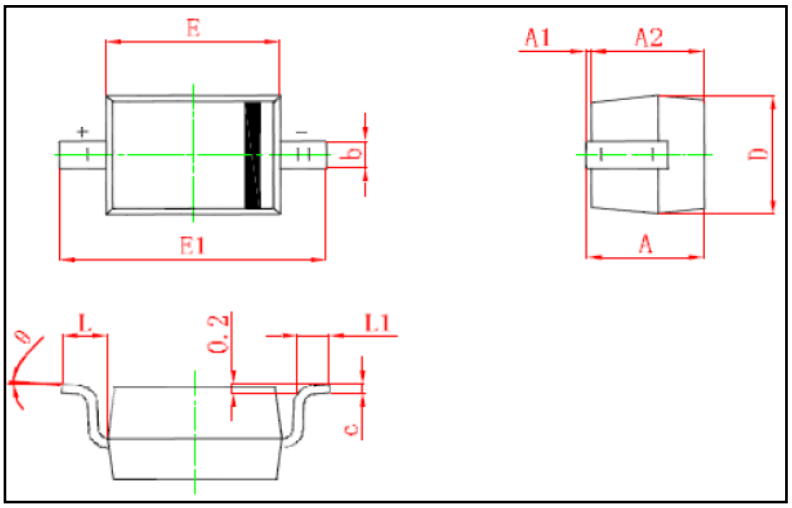
8 / 20μs Pulse Waveform



ESD Clamping Voltage

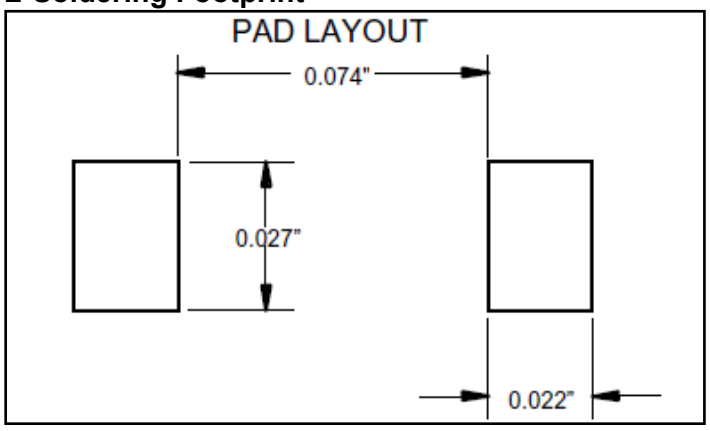
8 kV Contact per IEC61000−4−2

■ Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

■ Soldering Footprint



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