

Descriptions

This is working voltage 5V ESD protection diode in a SOD-323 package

Features

- 2-pin lead-less package
- Junction capacitance (Max value: 185pF)
- Peak pulse current (8/20 μ s) MAX : 25A
- IEC61000-4-2 (ESD): ± 30 kV (air), ± 30 kV (contact)
- Low leakage current
- RoHS Compliant

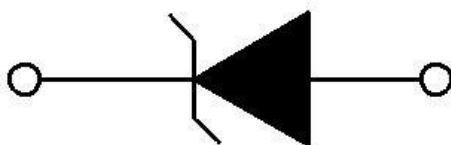
Applications

- Laptop Computers
- Cellular Phones
- Digital Cameras
- Personal Digital Assistants(PDAs)

Mechanical Characteristics

- Lead Finish:Matte Tin
- Case Material: "Green" Molding Compound
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Tape Reel :3000pcs

Equivalent Circuit & Pinning



Uni-directional



Absolute Maximum Ratings(Ta=25°C)

Parameters	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	PPP	350	W
Peak Pulse Current (8/20μs)	IPP	25	A
ESD per IEC 61000-4-2 (Air)	VESD	±30	KV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Working Voltage	VRWM				5	V
Reverse Breakdown Voltage	V(BR)R	IR = 1mA	6		9	V
Reverse Leakage Current	IR	VR = 5V			0.2	uA
Clamping voltage	VC	IPP = 1A, TP=8/20us			7	V
Clamping voltage	VC	IPP = 25A, TP=8/20us			14	V
Junction capacitance	Cj	VR = 0V, f = 1MHz			185	pF

Typical Characteristics

FIG1: Power rating derating curve

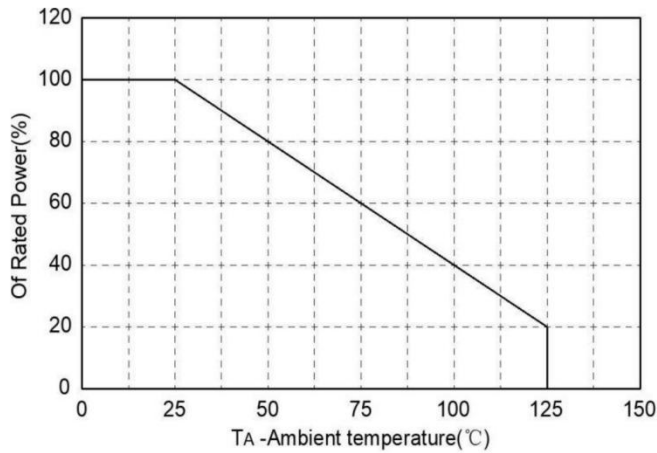


FIG2: pulse Waveform

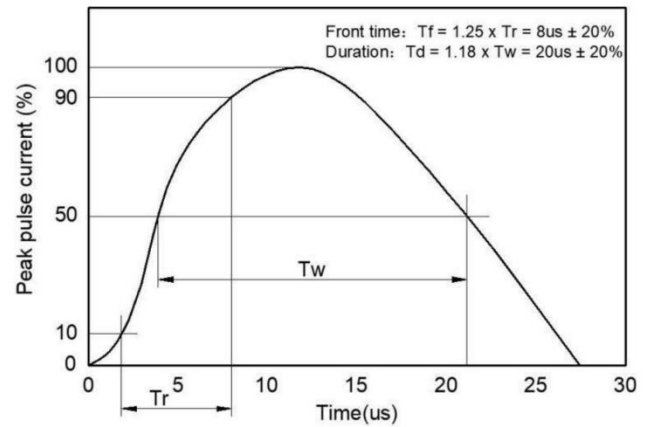


FIG3: Capacitance between terminals characteristics

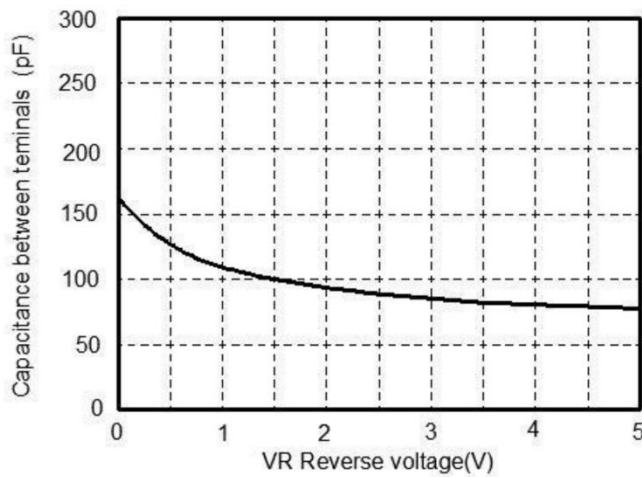
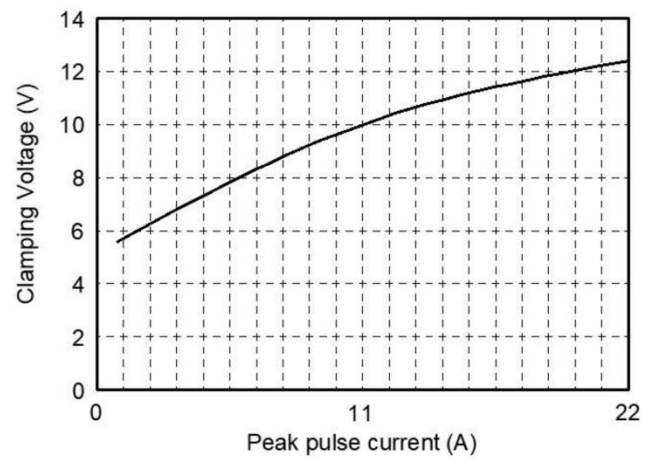
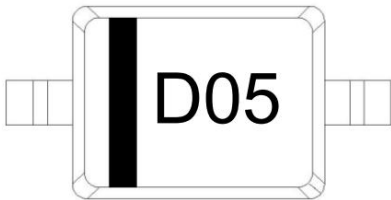


FIG4: Clamping Voltage vs. Peak Pulse Current

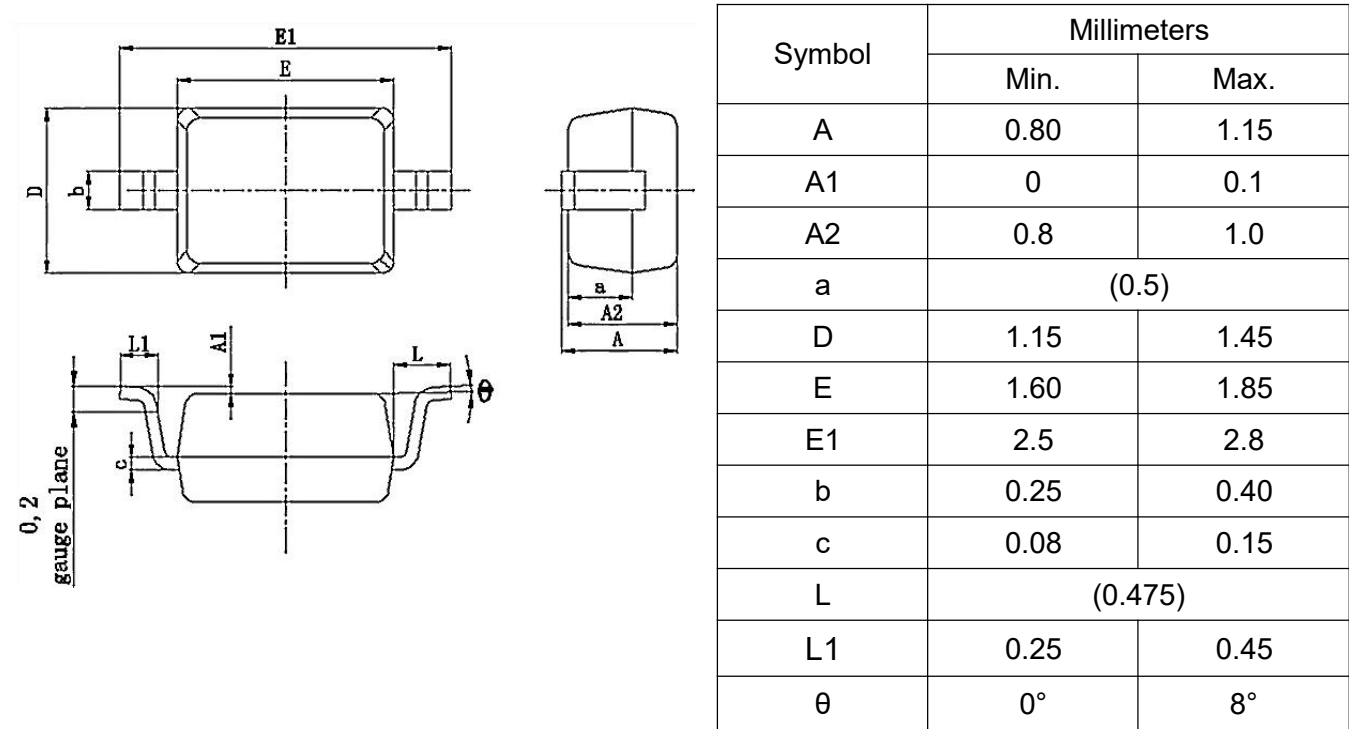


Marking Information

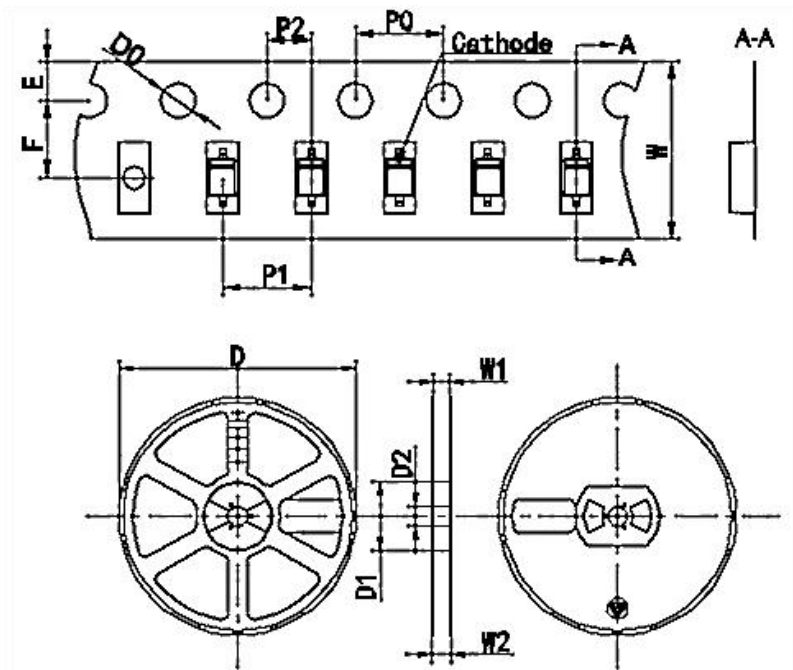


D05=Marking Code

Package mechanical data



Tape & reel specification - SOD-323



Symbol	Dimension in Millimeters
Tape	
D0	1.50+0.10/-0.00
E	1.75±0.10
F	3.50±0.10
P0	4.00±0.10
P1	4.00±0.10
P2	2.00±0.10
W	8.00+0.3/-0.1
Reel	
D	178.0±2.00
D1	54.40±1.00
D2	13.00±1.00
W1	9.50±1.00
W2	12.30±1.00