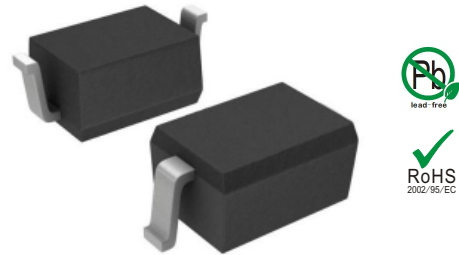


Features

- 350W peak pulse power (8/20us)
- Protects one data or power line
- Ultra low leakage: nA level
- Stand-off Voltage: 5 V
- Ultra low clamping voltage



SOD-323

IEC COMPATIBILITY (EN61000-4)

- IEC 61000-4-2 $\pm 30\text{kV}$ contact $\pm 30\text{kV}$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 17A (8/20 μs)

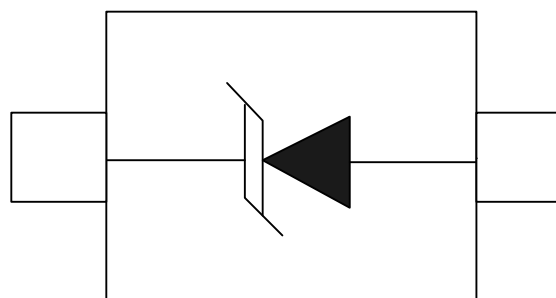
Applications

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

Mechanical Characteristics

- Package: SOD-323
- Case Material: "Green" Molding Compound.
- Molding compound flammability rating:
UL 94V-0
- Terminal Connections: See Diagram Below
- RoHS Compliant

Schematic & PIN Configuration



SOD-323

Absolute Maximum Rating($T_A=25^{\circ}\text{C}$,RH=45%-75%,unless otherwise noted)

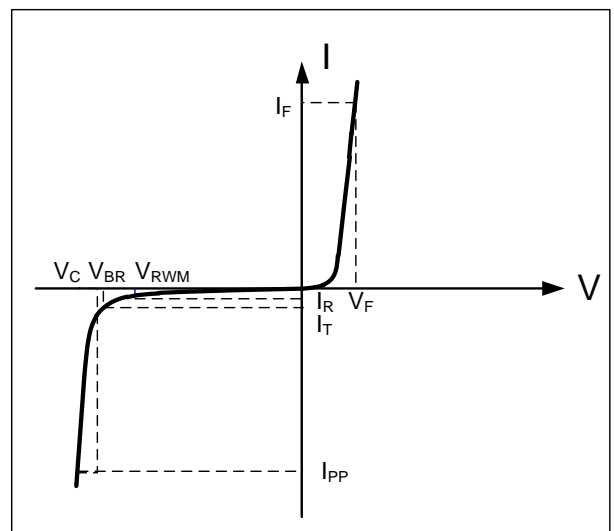
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20 μs)	Ppk	350	W
Peak Pulse Current (8/20 μs)	Ipp	17	A
ESD per IEC 61000-4-2 (Air)	VESD	± 30	kV
ESD per IEC 61000-4-2 (Contact)		± 30	
Operating Temperature Range	TJ	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	Tstg	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			5	V	
Breakdown Voltage	V_{BR}	6.2			V	$I_T = 1\text{mA}$
Reverse Leakage Current	I_R			10	μA	$V_{RWM} = 5\text{V}$
Clamping Voltage	V_C		9.8		V	$I_{PP} = 1\text{A}$ (8 x 20 μs pulse)
Clamping Voltage	V_C			18.6	V	$I_{PP} = 17\text{A}$ (8 x 20 μs pulse)
Junction Capacitance	C_J		300		pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$

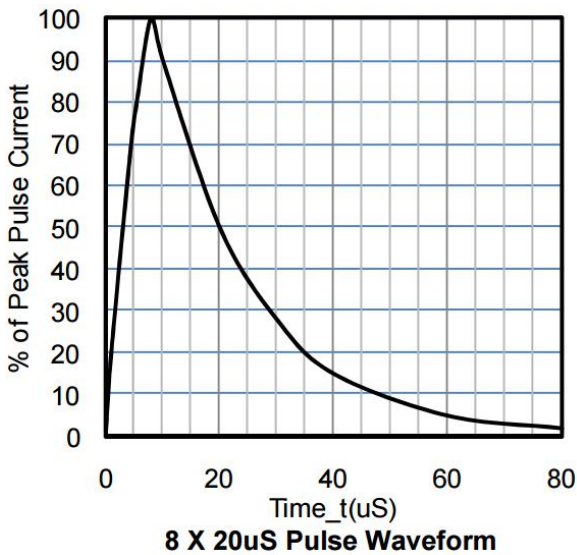
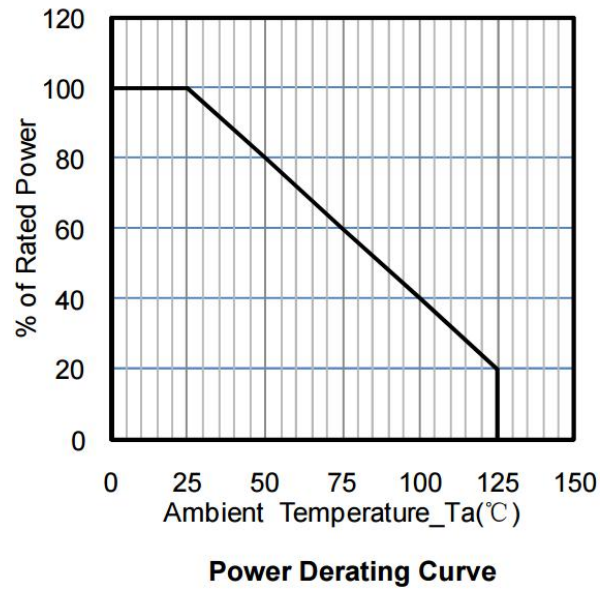
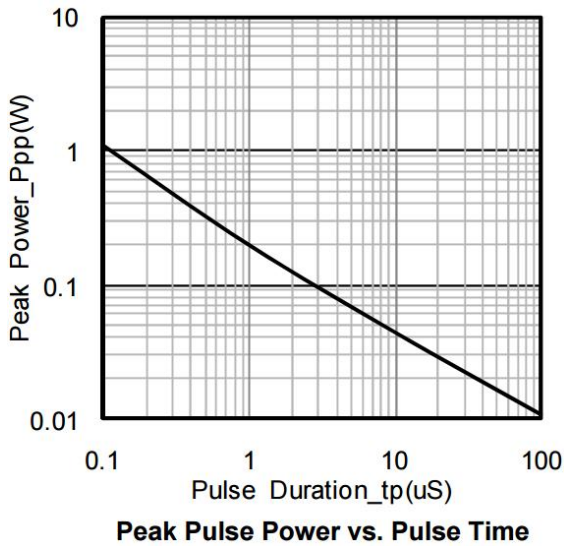
Electrical Parameters

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current

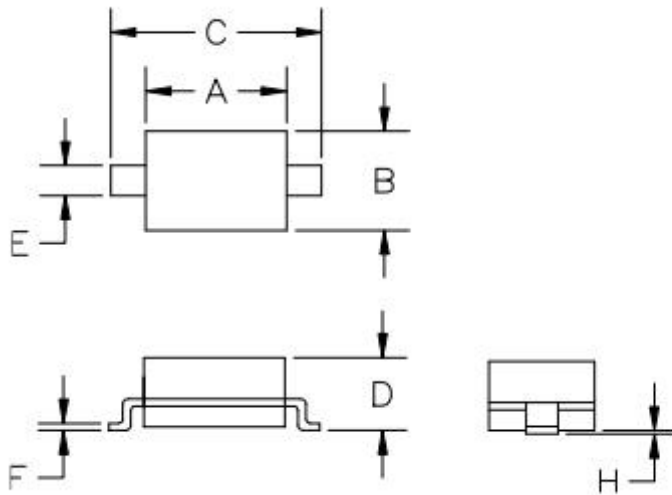


Note: 8/20 μs pulse waveform.

Typical Performance Characteristics (TA=25°C unless otherwise Specified)

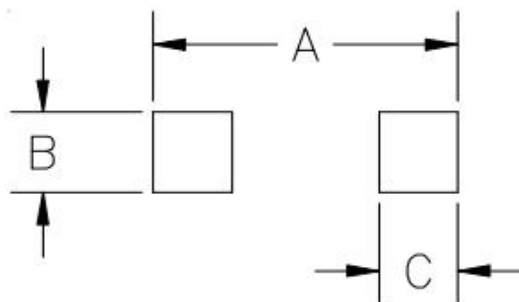


Outline Drawing



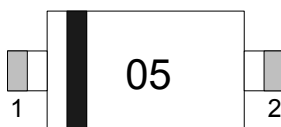
DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	1.500	1.800	0.060	0.071
B	1.200	1.400	0.045	0.054
C	2.300	2.700	0.090	0.107
D		1.100		0.043
E	0.300	0.400	0.012	0.016
F	0.100	0.250	0.004	0.010
H		0.100		0.004

Suggested Land Pattern



DIMENSIONS		
SYMBOL	MILLIMETER	INCHES
A	3.150	0.120
B	0.800	0.031
C	0.800	0.031

Marking



Pin Style: 1. Cathode 2. Anode

Ordering information

Order code	Package	Base qty	Delivery mode
PTD322H300S5C35	SOD323	3000	Tape and reel