H25D35V0B

Bi-directional ESD Protection Diode

Peak Pulse Power - 500 Watts
Reverse Working Voltage - 5.0V

Description

The H25D35V0B is designed to protect voltage sensitive components from ESD and transient voltage events. Excellent high surge capability and low leakage.This device has been specifically designed to protect sensitive components which are connected to data and transmission lines from overvoltage caused by ESD (electrostatic discharge).

Features

- 1 Channel of ESD Protection (Bi-directional)
- Peak Pulse Power :Ppp = 500W (tp=8/20 us)
- Reverse Working Voltage : 5V
- Low Leakage Current
- Low Clamping Voltage
- IEC 61000-4-2 (ESD) :±30kV(Contact) / ±30kV(Air)

Applications

- Audio Phone Jack
- Handheld - Wireless Systems
- USB Interface

Mechanical Data

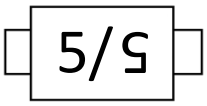
- Case: SOD323 Package
- Case Material: “Green” Molding Compound UL Flammability Classification Rating 94V-0
- Terminals:Matte tin plated,solderable per MIL-STD-750,method 2026
- Component in accordance to RoHS
- Halogen Free

Note: Products with logo HY or hy are made by HY Electronic (Cayman) Limited.

Ordering Information

- Package :SOD323
- Reel Size :7 (inches)
- Quantity Per Reel :3,000/Tape & Reel
- Quantity One Box :45,000/Tape & Reel
- Quantity One Carton :180,000/Tape & Reel

Marking Information

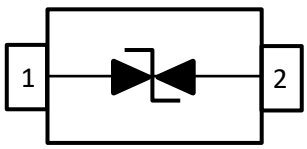


" 5/S " = Product Type Marking Code

Package Outline

SOD323 Top View

Device Schematic & PIN Configuration



Maximum Ratings (@TA = +25°C, unless otherwise specified.)

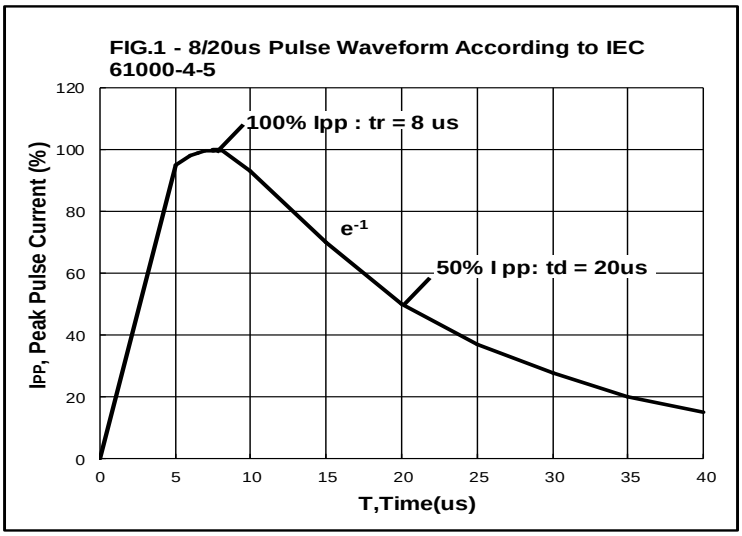
Absolute Ratings

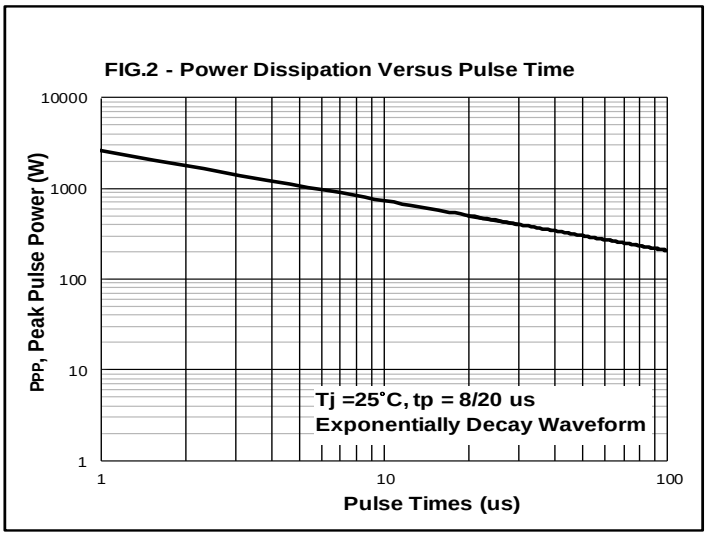
Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation (8/20 us)	P_{PP}	500	W
Peak Pulse Current (8/20 us)	I_{PP}	25	A
ESD Protection- Contact (Standard IEC 61000-4-2)	V_{ESD}	±30	k V
ESD Protection- Air (Standard IEC 61000-4-2)		±30	
Operating Temperature Range	T_J	-55 to +125	° C
Storage Temperature Range	T_{STG}	-55 to +150	° C
Soldering Temperature, t max =10s	T_L	260	° C

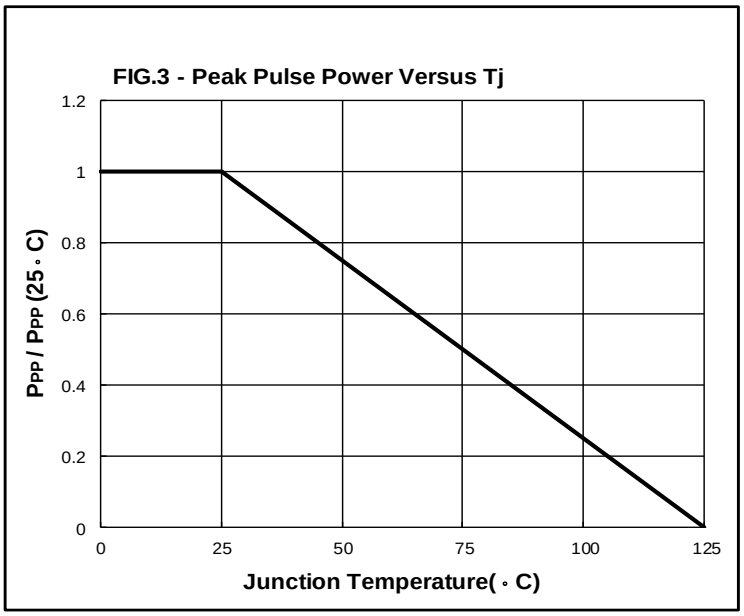
Electrical Characteristics

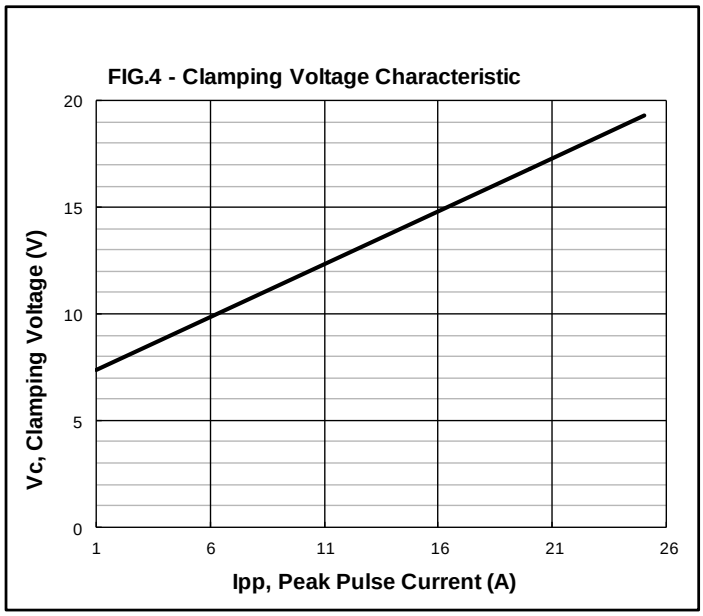
Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Working Voltage	---	V_{RWM}	-	-	5	V
Reverse Breakdown Voltage	I_T= 1mA	V_B	5.8	-	7.8	V
Reverse Current	V_R = 5V	I_R	-	-	1	uA
Reverse Clamping Voltage	I_{PP} = 1A (8/20μs)	V_C	-	-	9.8	V
	I_{PP} = 25A (8/20μs)		-	-	20	
Junction Capacitance	V_R = 0V, F = 1MHz	Cj	-	33	40	p F

Rating and Characteristic Curves



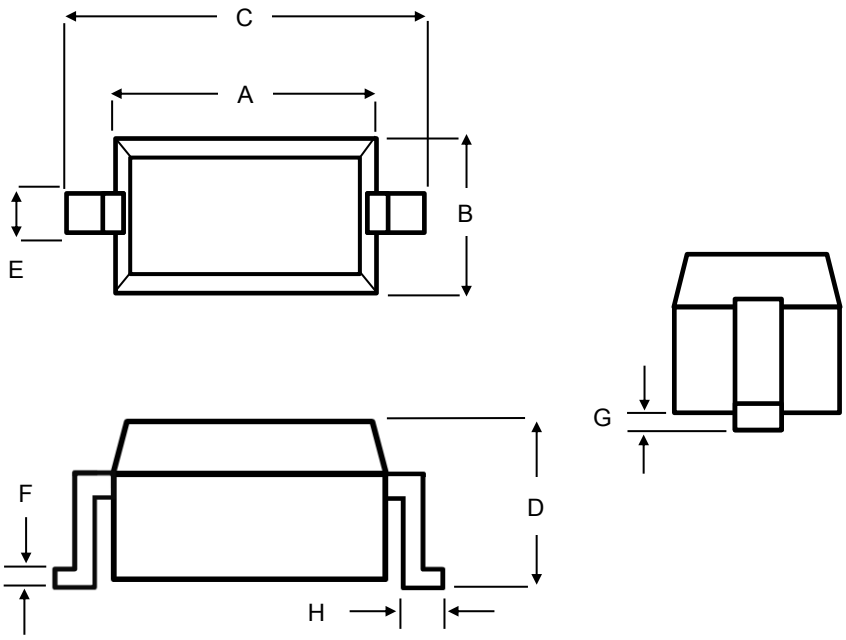






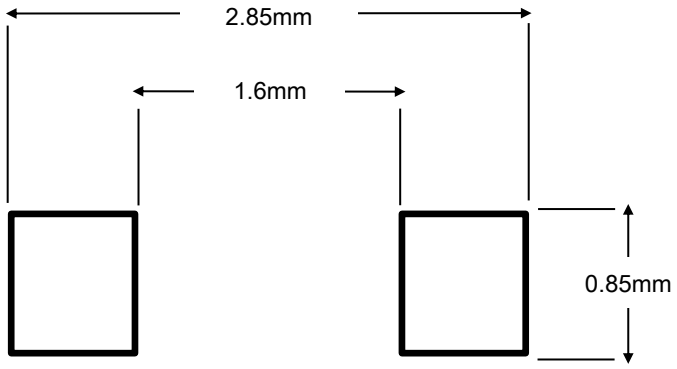
The curve above is for reference only.

Package Outline Dimensions



SOD323 Package		
Dim	Min	Max
A	1.6	1.8
B	1.2	1.4
C	2.5	2.7
D	-	1.0
E	0.25	0.35
F	0.08	0.15
G	-	0.1
H	0.25	0.4
All Dimensions in mm		

Suggested Soldering Pad Layout



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