H05X43V3B

Bi-directional ESD Protection Diode

Peak Pulse Power - 60 Watts
Reverse Working Voltage - 3.3V

Description

The H05X43V3B has been specifically designed to protect sensitive components which are connected to data and transmission lines from overvoltage caused by ESD (electrostatic discharge).

Features

- 2 Channel of ESD Protection (Bi-directional)
- Peak Pulse Power :Ppp = 60W (tp=8/20us)
- Reverse Working Voltage : 3.3V
- Low Leakage Current
- Low Clamping Voltage
- IEC 61000-4-2 (ESD) :±30kV(Contact) / ±30kV(Air)

Applications

- IoT Terminal Equipment & Device
- Portable Electronics
- Smart Wearable Device
- Cell phone Handsets and Accessories

Mechanical Data

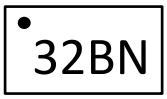
- Case: DFN1006-3L Package
- Case Material: “Green” Molding Compound UL Flammability Classification Rating 94V-0
- Component in accordance to RoHS
- Halogen Free

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

Ordering Information

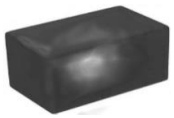
- Package :DFN1006-3L
- Reel Size :7 (inches)
- Quantity Per Reel :10,000/Tape & Reel
- Quantity One Box :100,000/Tape & Reel
- Quantity One Carton :400,000/Tape & Reel

Marking Information



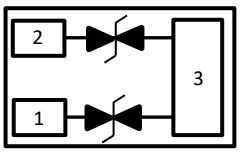
Product Type Marking Code

Package Outline



DFN1006-3L Top View

Device Schematic & PIN Configuration



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

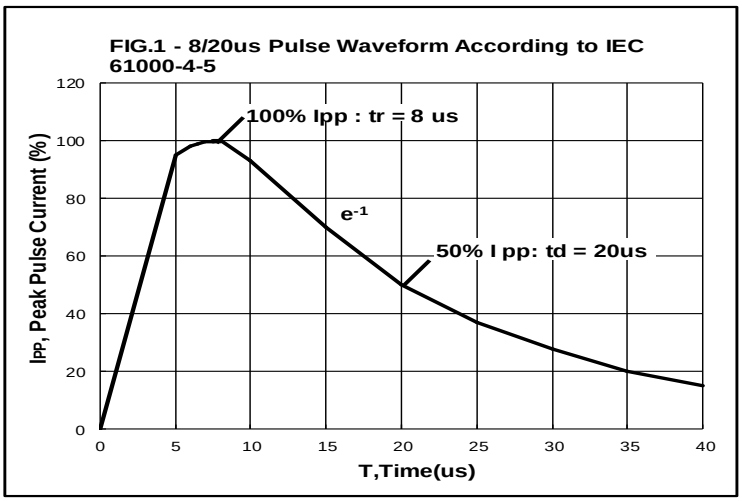
Absolute Ratings

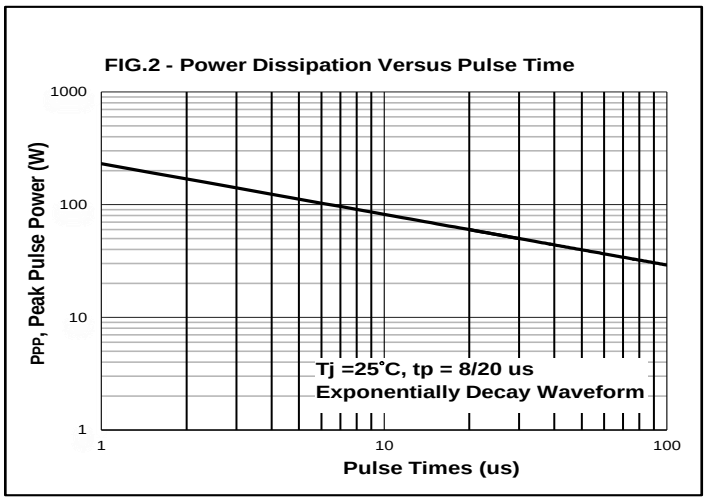
Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation (8/20 us)	P_{PP}	60	W
Peak Pulse Current (8/20 us)	I_{PP}	5	A
ESD Protection- Contact (Standard IEC 61000-4-2)	V_{ESD}	±30	kV
ESD Protection- Air (Standard IEC 61000-4-2)		±30	
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C
Soldering Temperature, t max =10s	T_L	260	°C

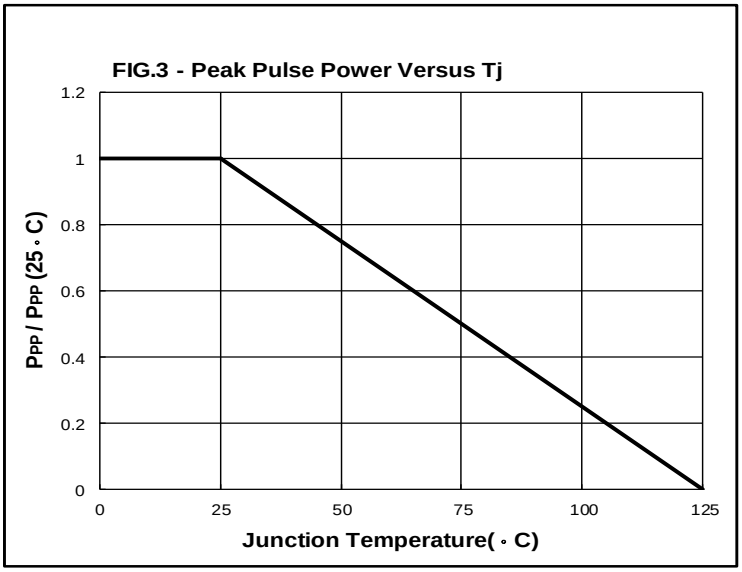
Electrical Characteristics

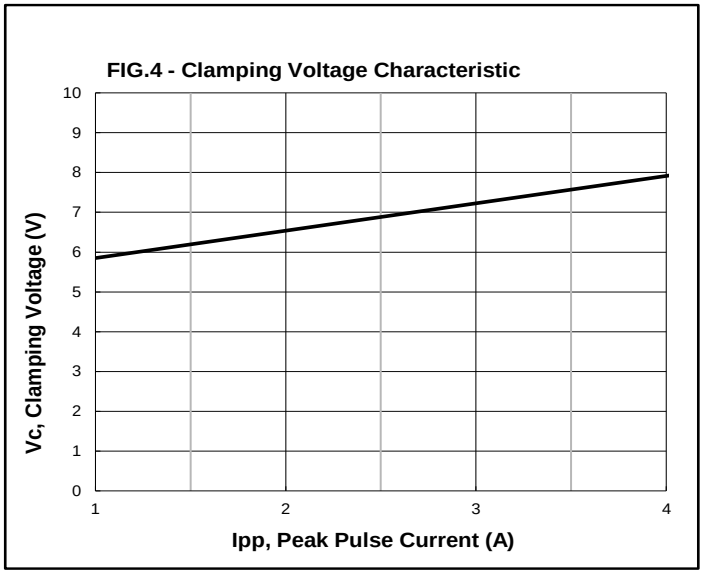
Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Working Voltage	---	V_{RWM}	-	-	3.3	V
Reverse Breakdown Voltage	I_T= 1mA	V_B	3.6	-	-	V
Reverse Current	V_R = 3.3V	I_R	-	-	1	uA
Reverse Clamping Voltage	I_{PP} = 1A (8/20μs)	V_C	-	-	6.5	V
	I_{PP} = 5A (8/20μs)		-	-	12	
Junction Capacitance	V_R = 0V, F = 1MHz Between I/O and Gnd	Cj	-	-	16.5	p F

Rating and Characteristic Curves



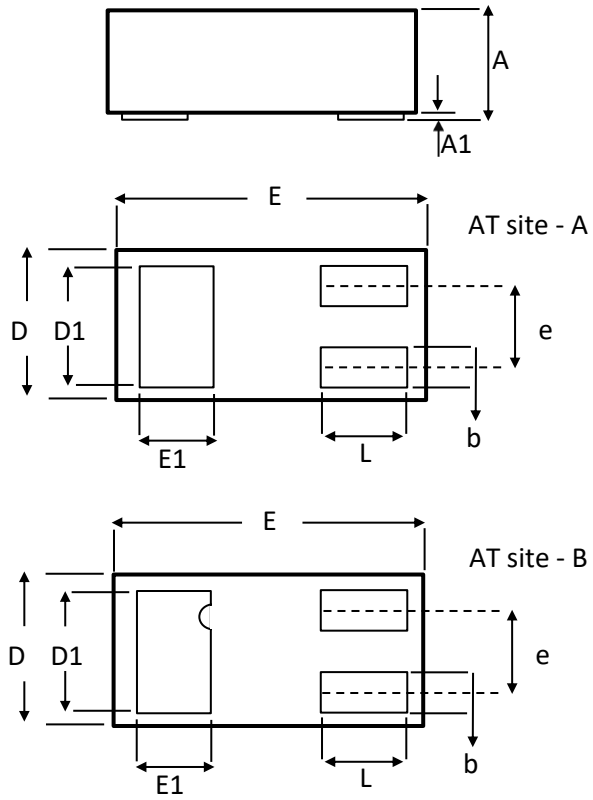






The curve above is for reference only.

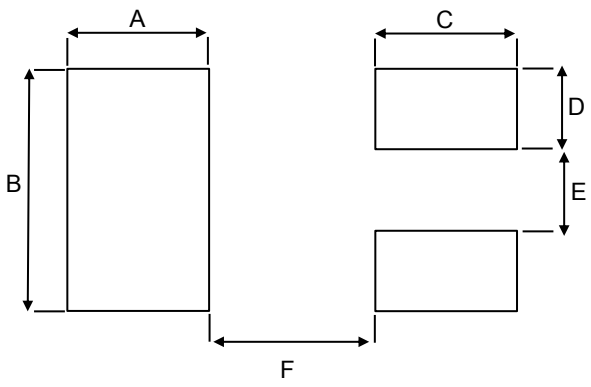
Package Outline Dimensions



DFN1006-3L Package		
Dim	Min	Max
A	0.45	0.55
A1	-	0.05
D	0.55	0.65
E	0.95	1.05
D1	0.45	0.55
E1	0.20	0.30
e	0.35 BSC	
L	0.20	0.30
b	0.10	0.20
All Dimensions in mm		

Note: HY internal have both AT site

Suggested Soldering Pad Layout



Dim.	Value
A	0.25
B	0.50
C	0.25
D	0.15
E	0.20
F	0.40
All Dimensions in mm	

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