

**Bi-directional ESD Protection Diode****Peak Pulse Power - 80 Watts**  
**Reverse Working Voltage - 3.3V****Description**

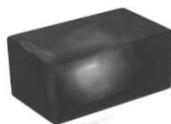
The H07X23V3B is offer superior electrical characteristics such as lower clamping voltage.They are designed to protect sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD).

**Features**

- 1 Channel of ESD Protection (Bi-directional)
- Peak Pulse Power :Ppp = 80W (tp=8/20 us)
- Reverse Working Voltage : 3.3V
- Low Leakage Current
- Low Clamping Voltage
- Junction Capacitance : 15pF (Max)
- IEC 61000-4-2 (ESD) :±20kV(Contact) / ±25kV(Air)

**Applications**

- Cellular Handsets & Accessories
- Notebooks & Handhelds
- Portable Instrumentation
- Digital Cameras
- MP3 Players

**Package Outline**

DFN1006 Top View

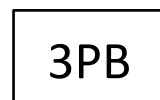
**Mechanical Data**

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

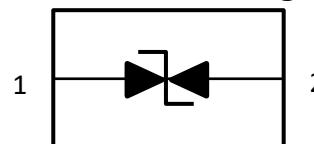
Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

**Ordering Information**

- Package :DFN1006
- 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**

"3PB"=Product Type Marking Code

**Package Outline****Device Schematic & PIN Configuration****Maximum Ratings (@TA = +25°C, unless otherwise specified.)****Absolute Ratings**

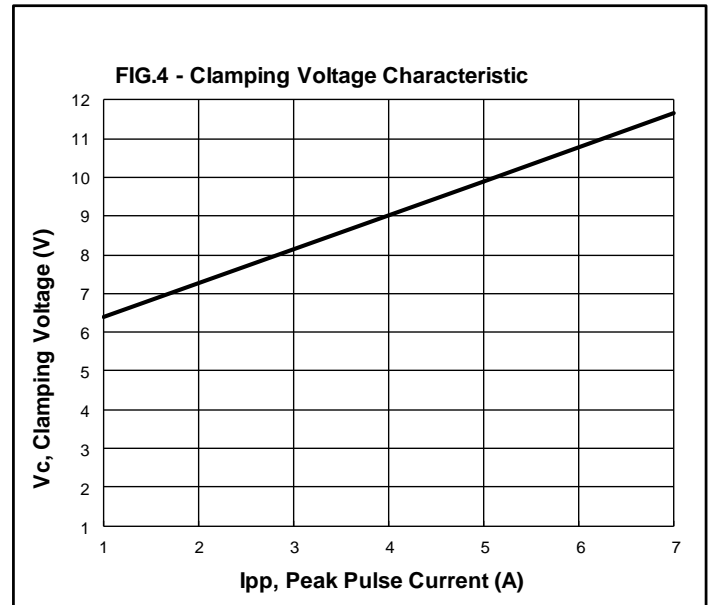
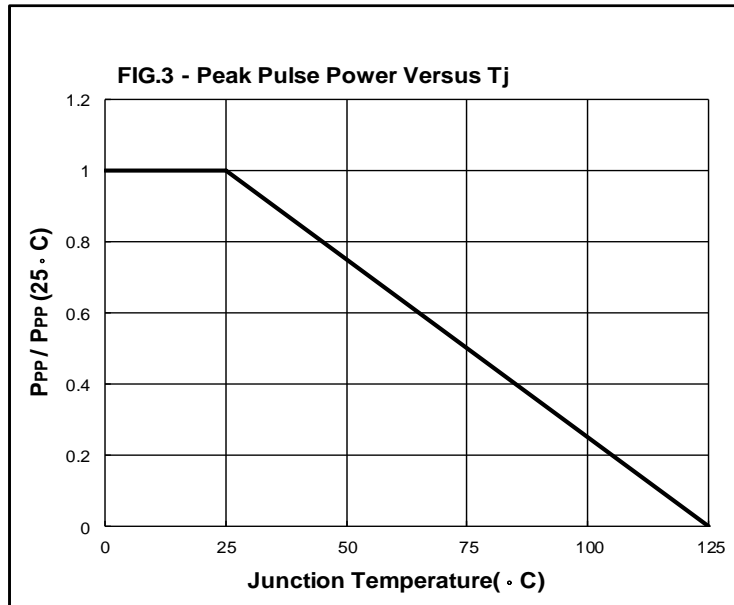
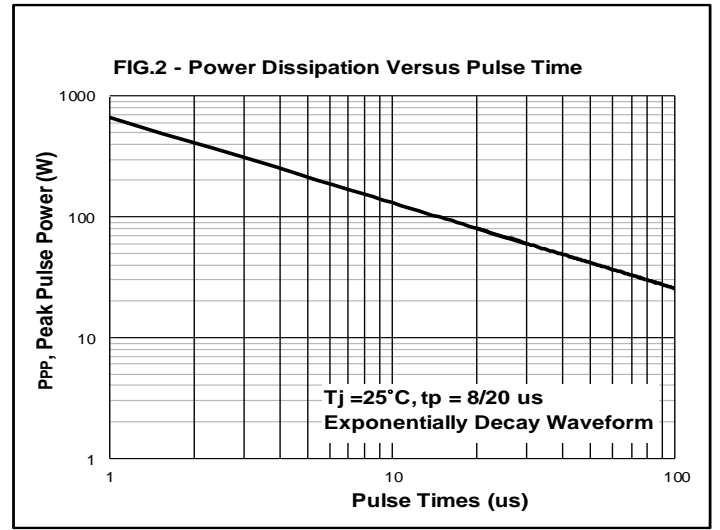
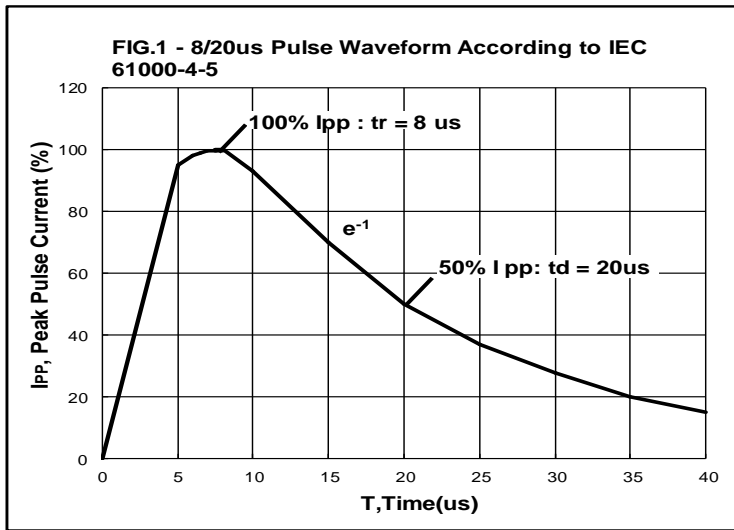
Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation (8/20 us)	P <sub>PP</sub>	80	W
Peak Pulse Current (8/20 us)	I <sub>PP</sub>	7	A
ESD Protection- Contact (Standard IEC 61000-4-2)	V <sub>ESD</sub>	±20	k V
ESD Protection- Air (Standard IEC 61000-4-2 )		±25	
Operating Temperature Range	T <sub>J</sub>	-55 to +125	° C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	° C
Soldering Temperature, t max =10s	T <sub>L</sub>	260	° C

**Electrical Characteristics**

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Working Voltage	---	V <sub>RWM</sub>	-	-	3.3	V
Reverse Breakdown Voltage	I <sub>T</sub> = 1mA	V <sub>B</sub>	3.6	-	-	V
Reverse Current	V <sub>R</sub> = 3.3V	I <sub>R</sub>	-	-	1	uA
Reverse Clamping Voltage	I <sub>PP</sub> = 1A (8/20μs)	V <sub>C</sub>	-	-	8	V
	I <sub>PP</sub> = 7A (8/20μs)		-	-	12	
Junction Capacitance	V <sub>R</sub> = 0V, F = 1MHZ	C <sub>j</sub>	-	-	15	p F

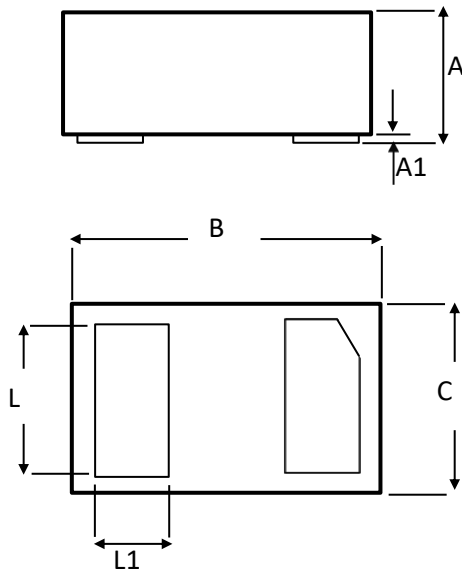


## Rating and Characteristic Curves



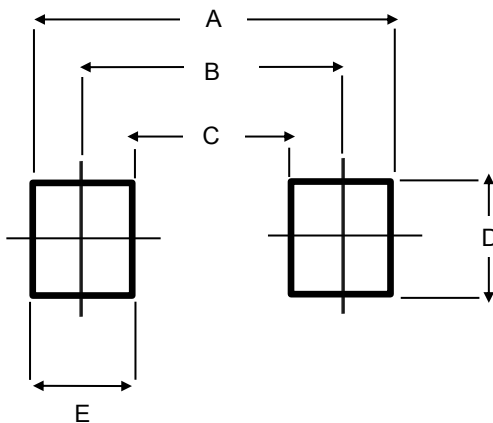


## Package Outline Dimensions



DFN1006 Package		
Dim	Min	Max
A	0.45	0.55
A1	-	0.02
B	0.95	1.05
C	0.55	0.65
L	0.45	0.55
L1	0.2	0.3
All Dimensions in mm		

## Suggested Soldering Pad Layout



Dim.	Value
A	1.10
B	0.90
C	0.30
D	0.60
E	0.40
All Dimensions in mm	



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