H02X215VBU

Bi-directional ESD Protection Diode

Peak Pulse Power - 70 Watts
Reverse Working Voltage - 15V

Description

The H02X215VBU is ultra low capacitance ESD designed to protect high speed data interfaces. This series has been specifically designed to protect sensitive components which are connected to high-speed data and transmission lines from overvoltage caused by ESD (electrostatic discharge).

Features

- 1 Channel of ESD Protection (Bi-directional)
- Peak Pulse Power :Ppp = 70W (tp=8/20 us)
- Reverse Working Voltage : 15V
- Low Leakage Current
- Ultra low capacitance: 0.25pF (Typ)
- IEC 61000-4-2 (ESD) :±15kV(Contact) / ±20kV(Air)

Applications

- High-speed data lines
- Computers and peripherals
- Communication systems

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 HY or hy are made by HY Electronic (Cayman) Limited.

Ordering Information

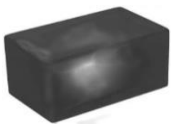
- Package :DFN1006
- Reel Size :7 (inches)
- Quantity Per Reel :10,000/Tape & Reel
- Quantity One Box :100,000/Tape & Reel
- Quantity One Carton :400,000/Tape & Reel

Marking Information

15BU

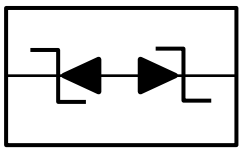
"15BU"=Product Type Marking Code

Package Outline



DFN1006 Top View

Device Schematic & PIN Configuration



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

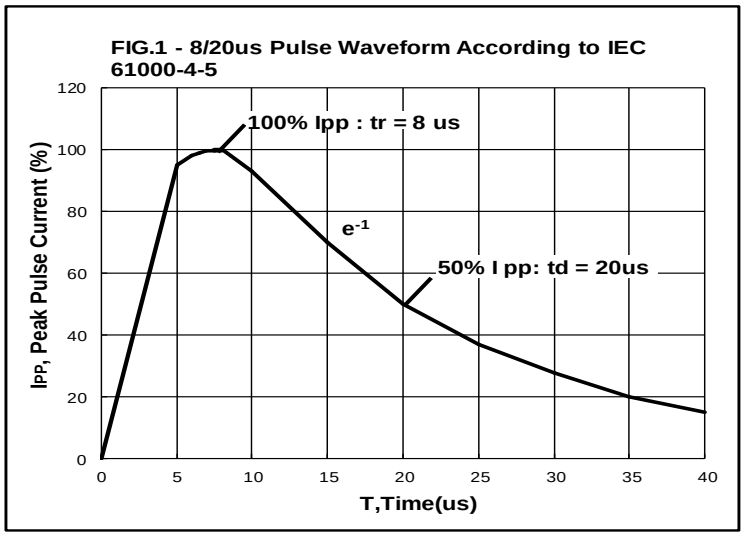
Absolute Ratings

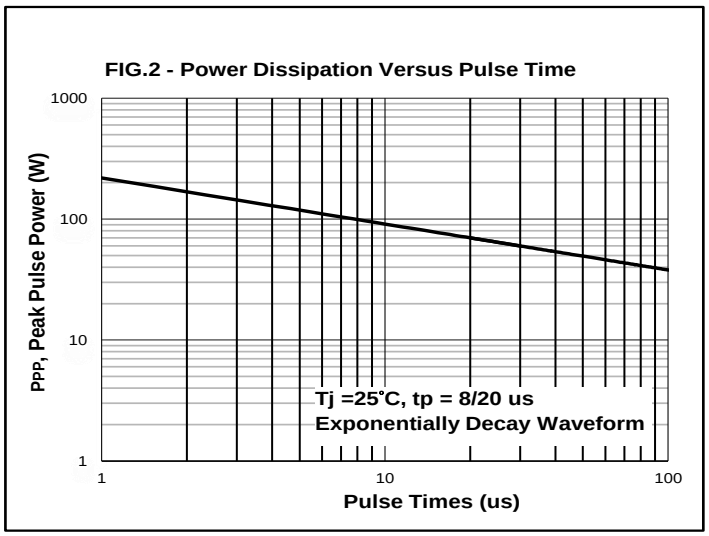
Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation (8/20 us)	P_{PP}	70	W
Peak Pulse Current (8/20 us)	I_{PP}	2	A
ESD Protection- Contact (Standard IEC 61000-4-2)	V_{ESD}	±15	k V
ESD Protection- Air (Standard IEC 61000-4-2)		±20	
Operating Temperature Range	T_J	-55 to +125	° C
Storage Temperature Range	T_{STG}	-55 to +150	° C
Soldering Temperature, t max =10s	T_L	260	° C

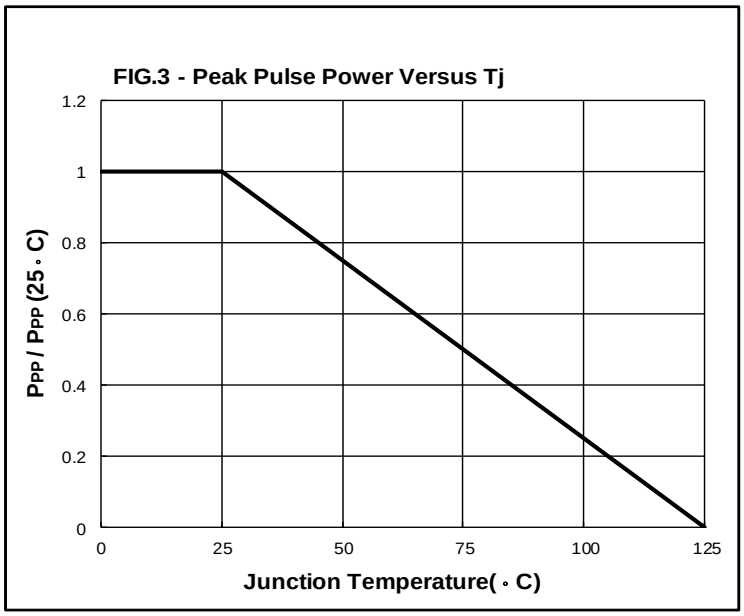
Electrical Characteristics

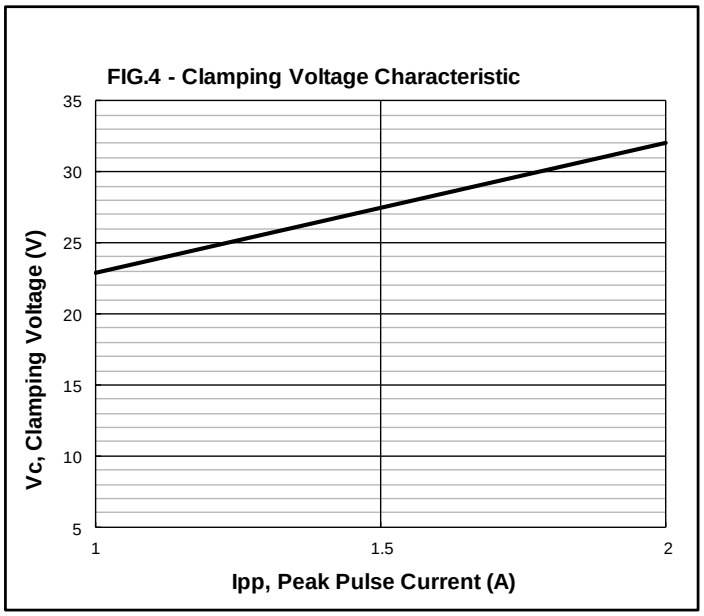
Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Working Voltage	---	V_{RWM}	-	-	15	V
Reverse Breakdown Voltage	I_T= 1mA	V_B	16	-	-	V
Reverse Current	V_R = 15V	I_R	-	-	500	nA
Reverse Clamping Voltage	I_{PP} = 1A (8/20μs)	V_C	-	-	25	V
	I_{PP} = 2A (8/20μs)		-	-	35	
Junction Capacitance	V_R = 0V, F = 1MHz	Cj	-	0.25	0.4	p F

Rating and Characteristic Curves



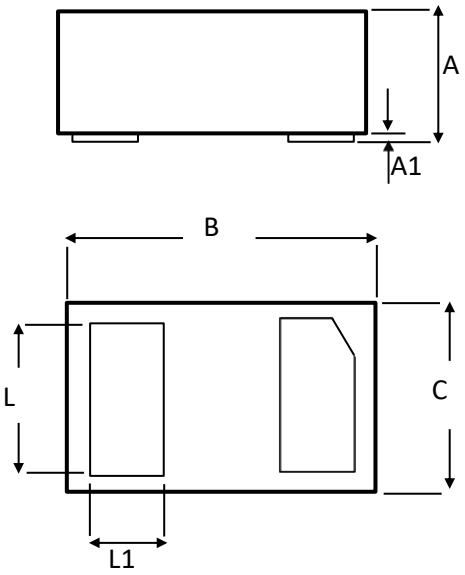






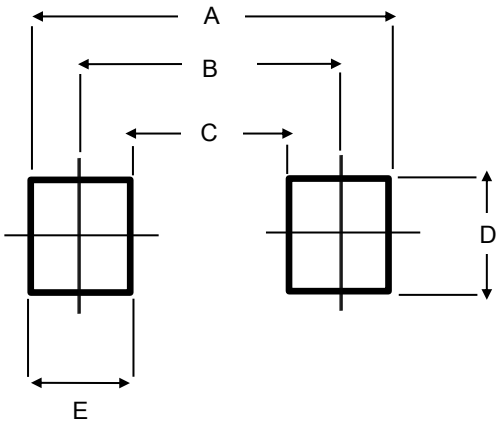
The curve above is for reference only.

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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