



Bi-directional ESD Protection Diode

Peak Pulse Power - 30 Watts
Reverse Working Voltage - 5V

Description

The H02X35V0BU 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 over voltage caused by ESD (electrostatic discharge).

Features

- 1 Channel of ESD Protection (Bi-directional)
- Peak Pulse Power :Ppp = 30W (tp=8/20 us)
- Reverse Working Voltage : 5V
- Low Leakage Current
- Low Clamping Voltage
- Junction Capacitance : 0.2pF (Typ)
- IEC 61000-4-2 (ESD) :±10kV(Contact) / ±15kV(Air)

Applications

- USB Data Line Protection, Type-C / 3.0 / 3.1
- High definition multi-media interface (HDMI) 1.4 / 2.0

Mechanical Data

- Case: DFN0603 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.

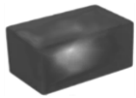
Ordering Information

- Package :DFN0603
- Reel Size :7 (inches)
- Quantity Per Reel :10,000/Tape & Reel
- Quantity One Box :60,000/Tape & Reel
- Quantity One Carton :600,000/Tape & Reel

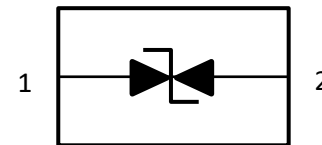
Marking Information


2

"2"=Product Type Marking Code

Package Outline

DFN0603 Top View

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

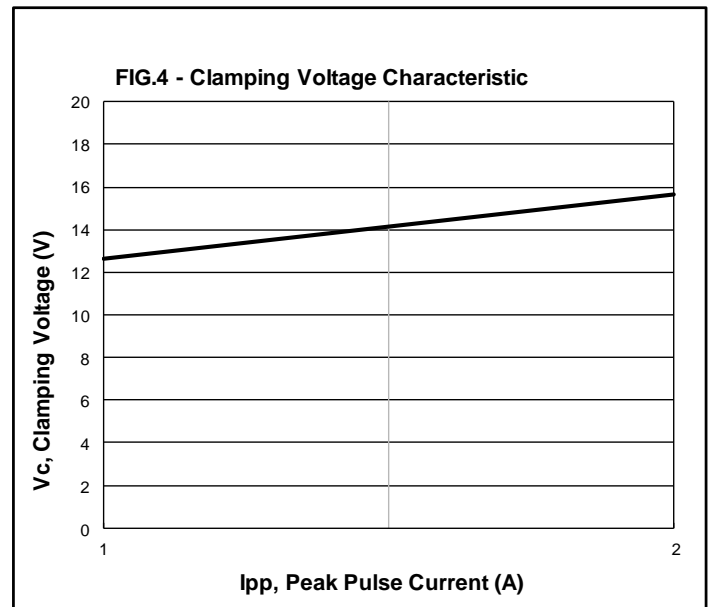
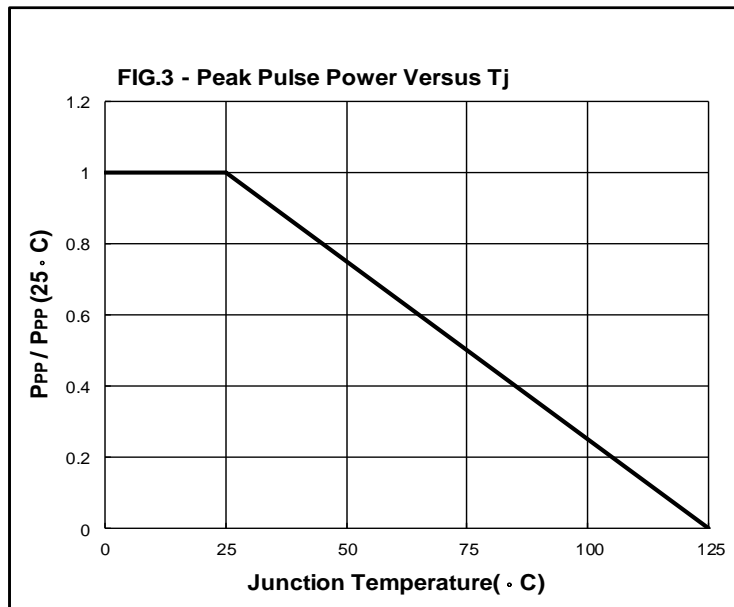
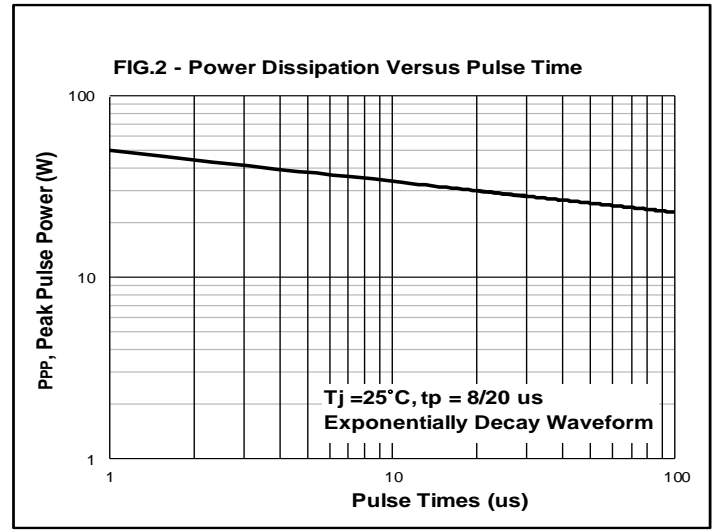
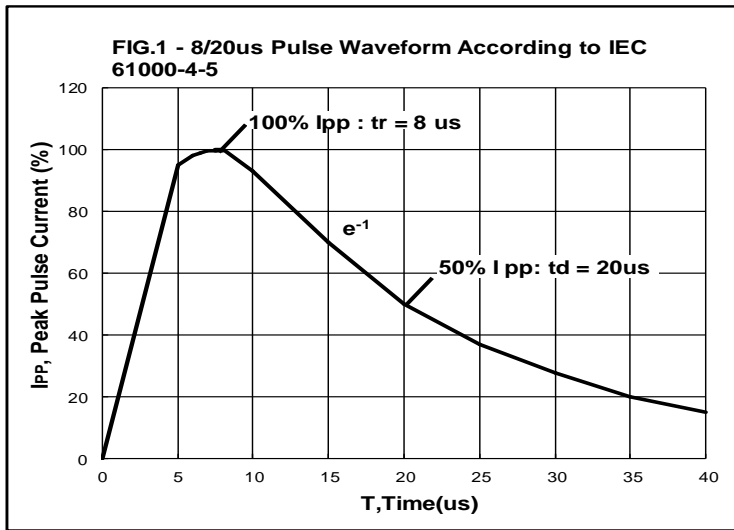
Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation (8/20 us)	P _{PP}	30	W
Peak Pulse Current (8/20 us)	I _{PP}	2	A
ESD Protection- Contact (Standard IEC 61000-4-2)	V _{ESD}	±10	k V
ESD Protection- Air (Standard IEC 61000-4-2)		±15	
Operating Temperature Range	T _J	-55 to +125	° C
Storage Temperature 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	6	-	-	V
Reverse Current	V _R = 5V	I _R	-	-	0.1	uA
Reverse Clamping Voltage	I _{PP} = 1A (8/20μs)	V _C	-	-	13	V
	I _{PP} = 2A (8/20μs)		-	-	16	
Junction Capacitance	V _R = 0V, F = 1MHz	C _j	-	0.2	0.3	p F

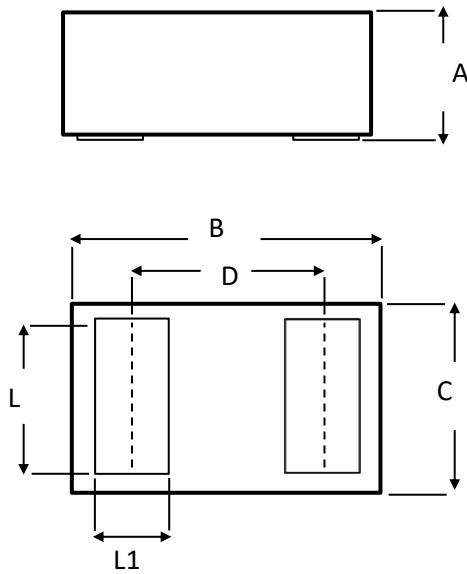


Rating and Characteristic Curves



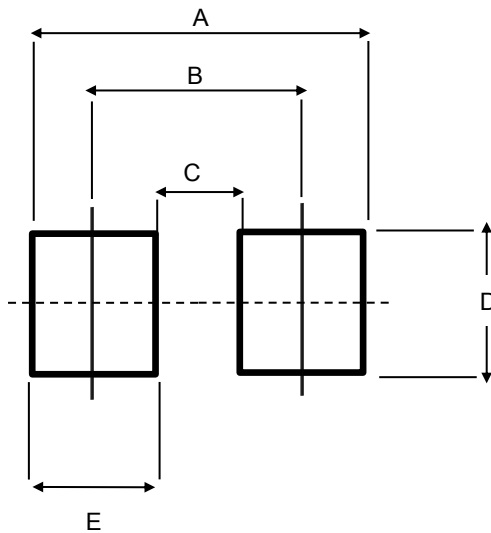


Package Outline Dimensions



DFN0603 Package		
Dim	Min	Max
A	0.275	0.340
B	0.570	0.670
C	0.270	0.370
L	0.225	0.295
L1	0.125	0.195
D	0.380(Typ)	
All Dimensions in mm		

Suggested Soldering Pad Layout



Dim.	Value
A	0.64
B	0.42
C	0.20
D	0.36
E	0.22
All Dimensions in mm	



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