H09C35V0BU

Ultra Low Capacitance
Bi-directional ESD Protection Diode

Peak Pulse Power - 65 Watts
Reverse Working Voltage - 5.0 V

Description

The H09C35V0BU is ultra-low capacitance ESD designed to protect high speed data interfaces. This 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 = 65W (tp=8/20 us)
- Reverse Working Voltage : 5.0V
- Low Leakage Current
- Low Clamping Voltage
- Junction Capacitance : 0.28pF (Max)
- IEC 61000-4-2 (ESD) :±15kV(Contact) / ±20kV(Air)

Applications

- Hand held portable applications
- Computers interfaces protection
- Serial and parallel port protection
- Microprocessors protection
- Control signal and power lines protection

Mechanical Data

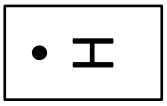
- Case: CSP0603 Package
- Case Material: UL Flammability Classification Rating 94V-0
- Component in accordance to RoHS
- Halogen Free

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

Ordering Information

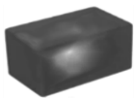
- Package :CSP0603
- Reel Size :7 (inches)
- Quantity Per Reel :10,000/Tape & Reel
- Quantity One Box :100,000/Tape & Reel
- Quantity One Carton :400,000/Tape & Reel

Marking Information



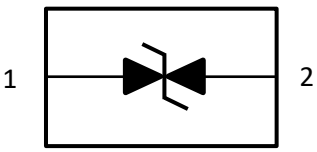
Product Type Marking Code

Package Outline



CSP0603 Top View

Device Schematic & PIN Configuration



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

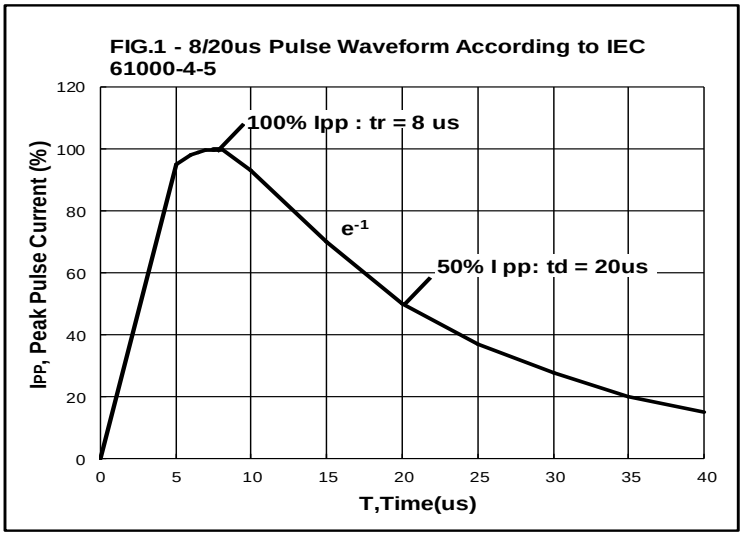
Absolute Ratings

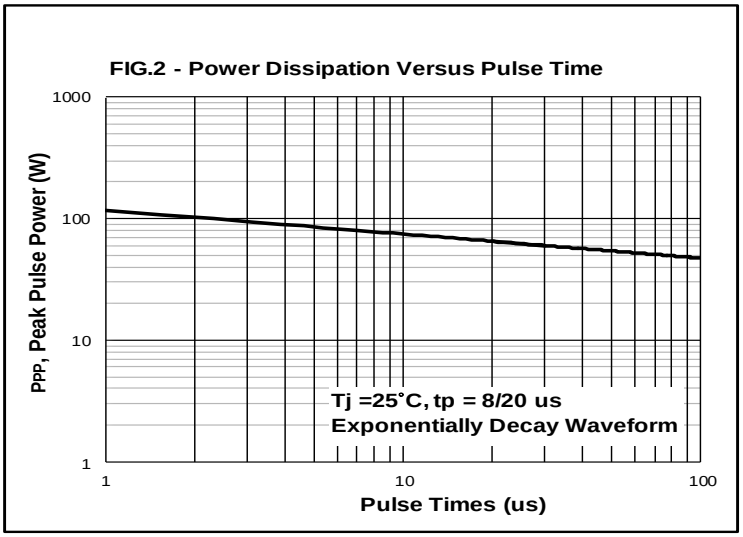
Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation (8/20 us)	P_{PP}	65	W
Peak Pulse Current (8/20 us)	I_{PP}	9	A
Operating Supply Voltage	V_{DC}	±5.5	V
ESD Protection- Contact (Standard IEC 61000-4-2)	V_{ESD}	±15	k V
ESD Protection- Air (Standard IEC 61000-4-2)		±20	
Operating Temperature Range	T_J	-55 to +125	° C
Storage Temperature Range	T_{STG}	-55 to +150	° C
Soldering Temperature, t max =10s	T_L	260	° C

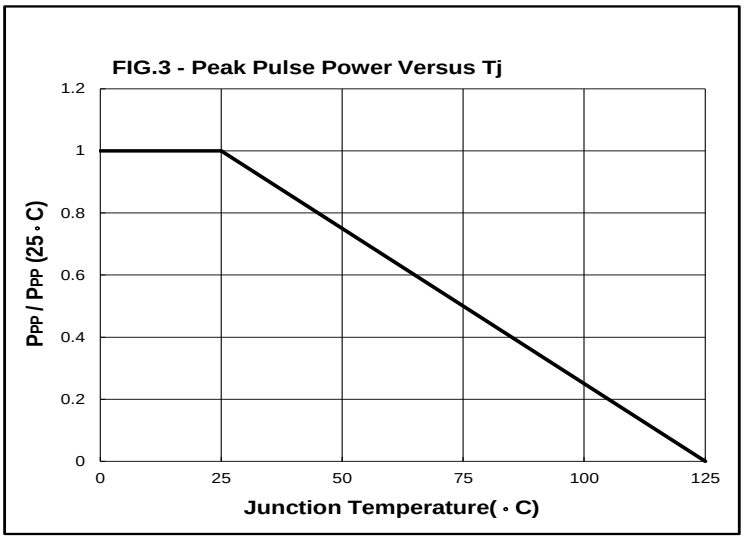
Electrical Characteristics

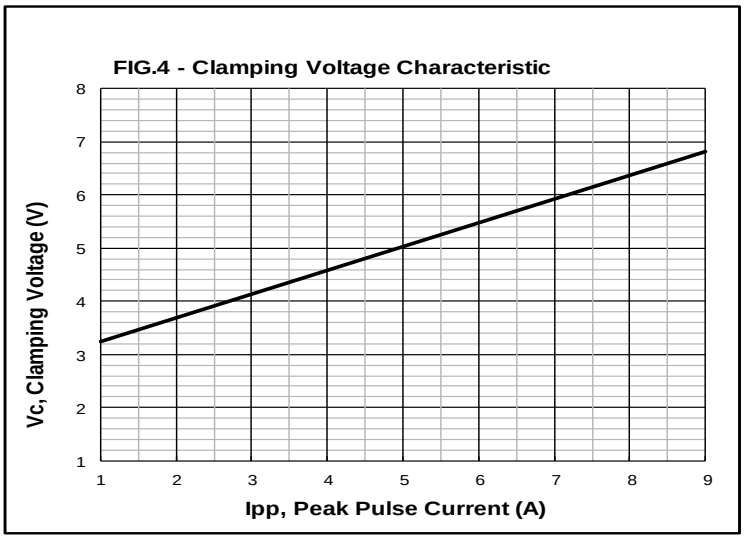
Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Working Voltage	---	V_{RWM}	-	-	5	V
Reverse Breakdown Voltage	I_T = 1mA	V_B	6	-	-	V
Reverse Leakage Current	V_R = 5V	I_R	-	-	0.1	uA
Reverse Clamping Voltage	I_{PP} = 9A (8/20μs)	V_C	-	-	7.2	V
TLP Clamping Voltage	I_{PP} =16A, T_P =100ns	V_{TLP}	-	6	-	V
Dynamic Resistance	TLP Pulse	R_{DYN}	-	0.2	-	Ω
Junction Capacitance	V_R = 0V, F = 1MHz	Cj	-	-	0.28	p F

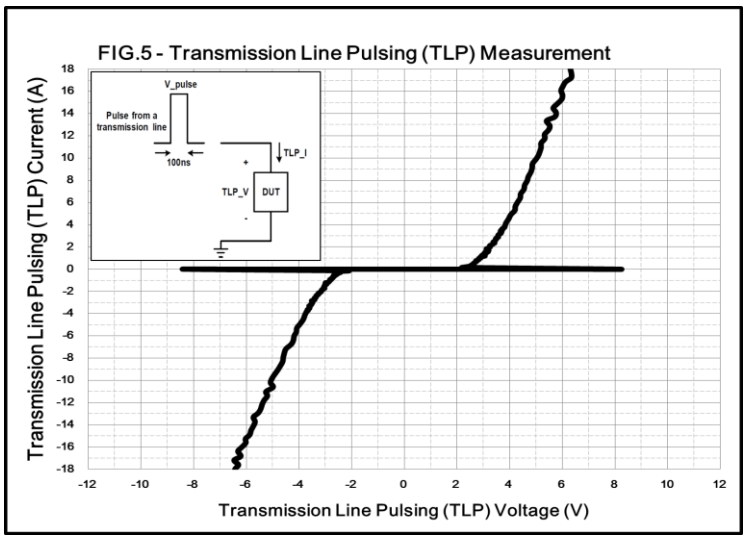
Rating and Characteristic Curves





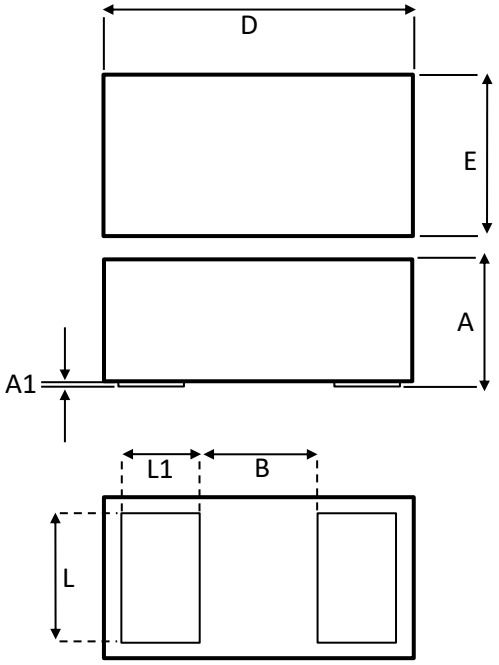






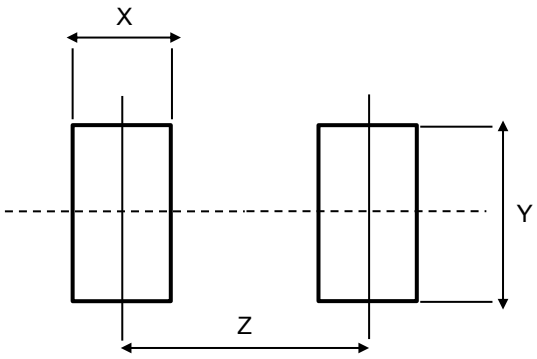
The curve above is for reference only.

Package Outline Dimensions



CSP0603 Package		
Dim	Min	Max
D	0.575	0.625
E	0.275	0.325
A	0.171	0.233
A1	-	0.014
L	0.19	0.23
L1	0.13	0.16
B	0.20	0.26
All Dimensions in mm		

Suggested Soldering Pad Layout



Dim.	Value
X	0.15
Y	0.25
Z	0.38
All Dimensions in mm	

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