

PHENITEC
SEMICONDUCTOR

6BUL1P6V0
**Bi-Directional Ultra-Low
Capacitance TVS**

Features

- Ultra Low Capacitance 0.50pF
- Small Chip Size 0.33*0.26mm
- High ESD Protection Level IEC61000-4-2(ESD) +/-10kV(Contact)
- Stand-off Voltage:5V
- Bi-Directional TVS

Applications

- USB2.0

Item	Characteristics
Wafer size	6inch
Chip size	330 * 260 um
Top metalization	Al-Si-Cu

Maximum Ratings (Ta=25degC)(*1)

Symbol	Parameter	Value	Units
T _{stg}	Storage temperature Range	-55 to+150	Deg C
T _j	Maximum junction temperature	-55 to+125	Deg C
P _d	Power Dissipation	150	mW
I _{pp}	Peak pulse current(t=8/20usec)	1	A
V _{pp}	Electrostatic discharge IEC61000-4-2 Contact Discharge	±10	kV

(*1) All Rating values for reference on a SOT-23 package configuration (front: Au wire 35um, back: Au eutectic), mounted on PCB of 1.5cm by 2.5cm.

Electrical Characteristics (Ta=25degC)

■ Bi-Direction Use(*1)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse stand-off voltage	V _{RWM}	-	-	5.0	V	
Leakage current	I _R	-	1.0	-	uA	V _{RWM} = 5.0V
Breakdown voltage	V _{BR}	5.4	-	-	V	I _R = 1mA
Clamping voltage	V _c	-	12.9	-	V	I _{pp} =1A , t _p =8/20us
Capacitance	C	-	0.5	0.9	pF	V _R = 0V, f = 1MHz

*1 All values for reference on a SOT-23 package configuration
(front: Au wire 35um, back: Au eutectic)

Ordering Information

Type	Back Metalization	Die Bonding For
6BUL1P6V0S5	Au	Eutectic & Ag Paste

Note

1. Assembly

Example: DFN1006

