

PHENITEC SEMICONDUCTOR

6TDA3P6V0

Ultra Low Capacitance TVS Arrays

Features

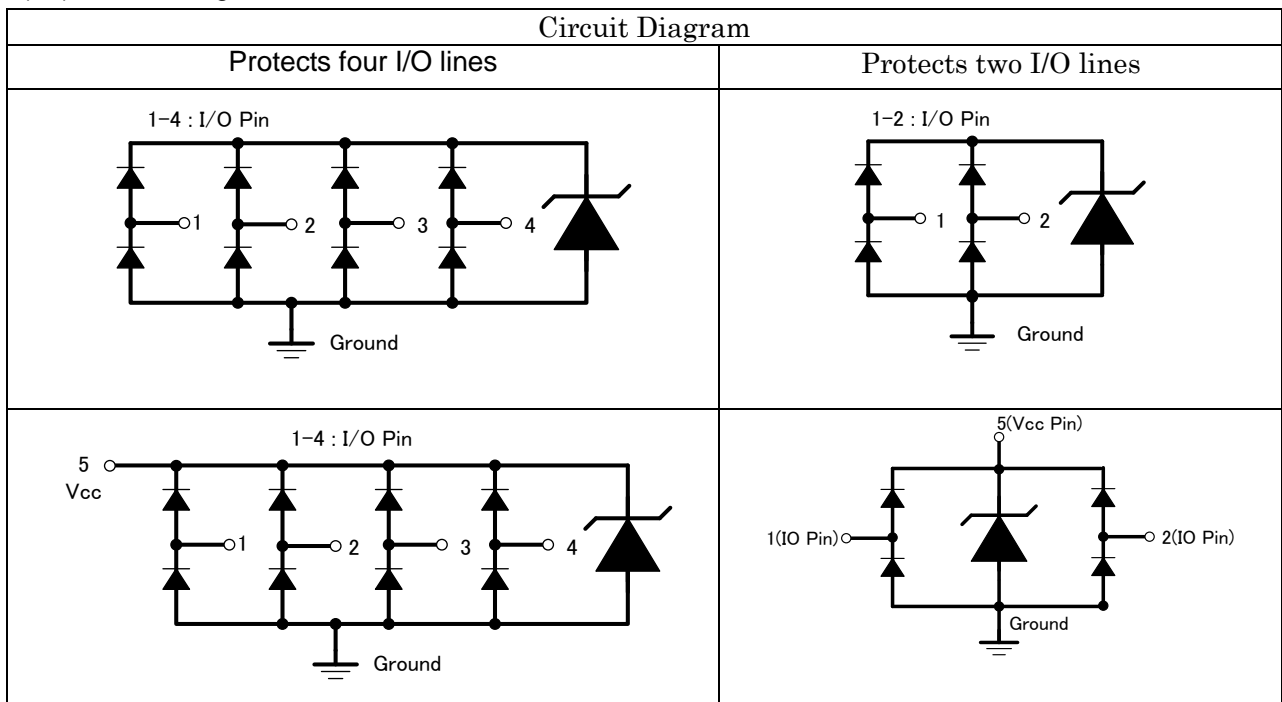
- Protects two or four I/O lines
- Ultra low capacitance
- Low operating voltage : 5V
- Low clamping voltage

Applications

- High Definition Multi-Media Interface(HDMI)
- Digital Visual Interfaces(DVI)
- Display Port
- MDDI Ports

Item	Characteristics
Wafer size	6inch
Chip size	540 * 480 um
Top Metalization	Al-Si

(*1) See Ordering Information



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

Symbol	Parameter	Value	Units
Ppk	Peak Pulse Power (tp=8/20us)	54	W
Ipp	Maximum Peak Pulse Current(tp=8/20us)	3	A
Tstg	Storage Temperature Range	-55 to+150	Deg C
Tj	Maximum Junction Temperature	-55 to+125	Deg C
Vpp	Electrostatic Discharge(*3)		
	IEC61000-4-2 Air Discharge (*2)	+/-17	kV
	IEC61000-4-2 Contact Discharge	+/-15	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.

(*2) Reference only

(*3) Between any I/O pin to ground

Electrical Characteristics (Ta=25degC)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Reverse stand-off voltage	VRWM	-	-	5.0	V	Any I/O pin to ground
Leakage current	IR	-	-	1.0	uA	VRWM = 5V Any I/O pin to ground
Breakdown voltage	VBR	6.0	-	-	V	IR= 1mA Any I/O pin to ground
Capacitance 1(*1)	C	-	0.25	0.4	pF	VR = 0V, f = 1MHz Between I/O pins
Capacitance 2(*1)	C	-	0.50	0.8	pF	VR = 0V, f = 1MHz Any I/O pin to ground
Clamping voltage 1(*1)	Vc	-	-	15	V	Ipp=1A (tp=8/20us) Any I/O pin to ground
Clamping voltage 2(*1)	Vc	-	-	18	V	Ipp=3A (tp=8/20us) Any I/O pin to ground

(*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.

Note