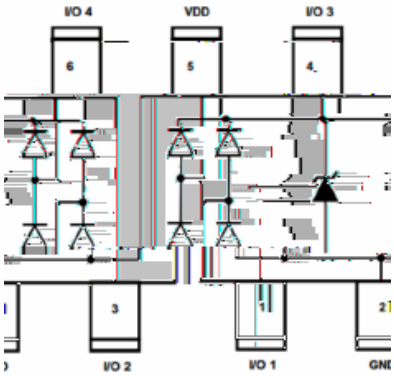
4-Line, Uni-directional, low Capacitance TVS Diode Array



Features

- Stand-off voltage: 3.3V Max
- Transient protection for each line according to
  IEC61000-4-2(ESD): ±30kV (contact)
  IEC61000-4-5(surge): 22A (8/20μs)
- Ultra-low capacitance: C_J = 1.5 pF typ
- Low leakage current
- Low clamping voltage
- RoHS Compliant

Applications

- LVDS Interfaces
- MagJacks/Integrated Magnetics
- Notebook/Desktops/Service
- Central Office Equipment
- 10/100/1000 Ethernet

Mechanical Characteristics

- Package: SOT-23-6L
- Lead Finish: MatM

■

ute Maximum Ratings (Ta=25°C unless otherwise specified)

PARAMETER	SYMBOL	Rating	UNIT
e power (t_p = 8/20μs)	P_{pk}	300	W
e current (t_p = 8/20μs)	I_{PP}	22	A
rding to IEC61000-4-2 air discharge	V_{ESD}	±30	KV
rding to IEC61000-4-2 contact discharge		±30	KV
emperature	T_J	-55~125	°C
emperature	T_{STG}	-55~150	°C

rical Characteristics T_a=25 Unless otherwise specified

s

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
maximum working voltage	V_{RWM}	V	Any I/O Pin to ground			3.3
leakage current	I_R	μA	V_{RWM} =5V, any I/O Pin to ground			0.5
wn Voltage	V_{PT}	V	IT = 2μA, any I/O pin to ground	3.5		
ck Voltage	V_{SB}	V	IT = 50mA, any I/O pin to ground	2.8		
g voltage [3]	V_{CL}	V	I			

■**Typical Performance Characteristics** (Ta=25°C unless otherwise Specified)

Fig.1 8/20μs waveform per IEC61000-4-5

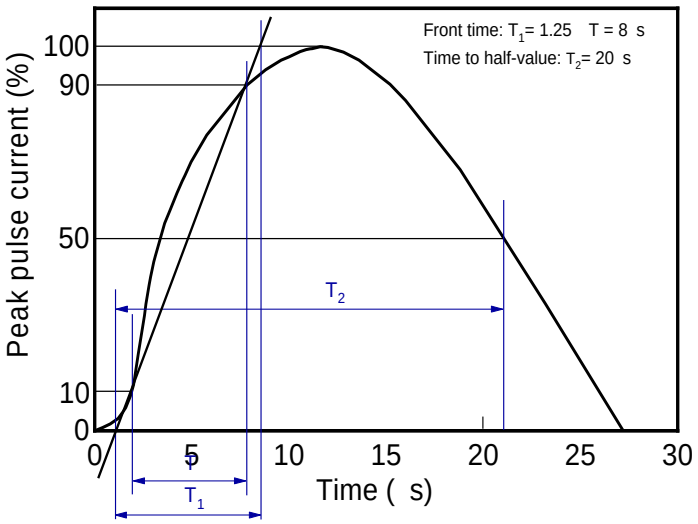


Fig.2 Contact discharge current waveform per IEC61000-4-2

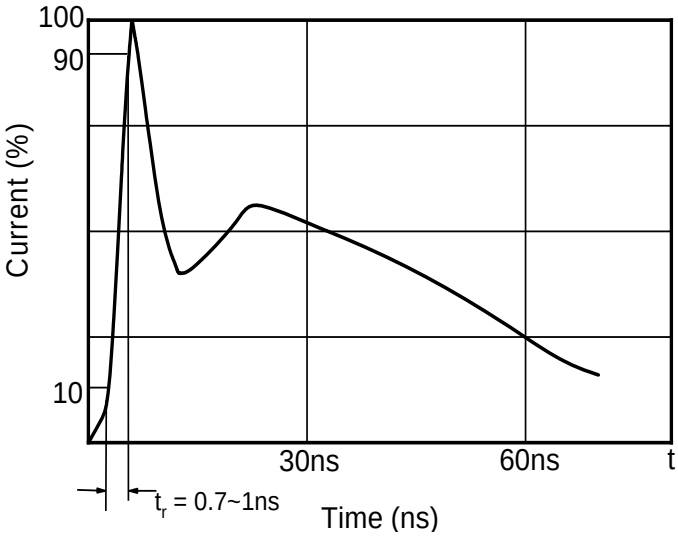
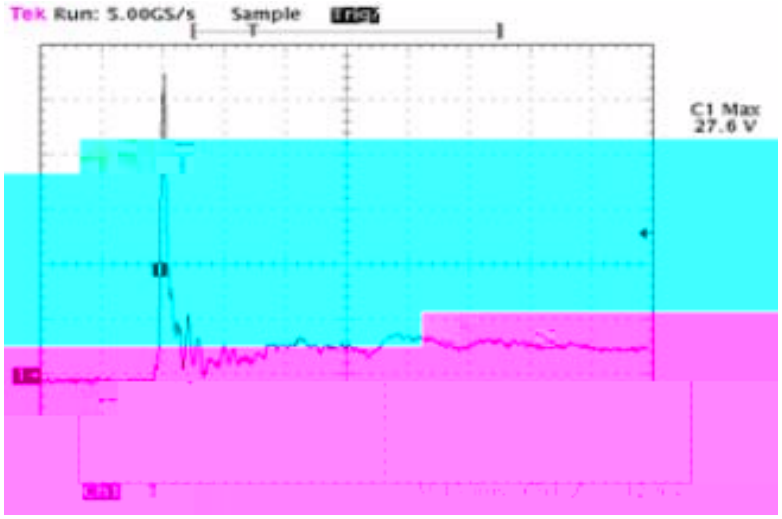
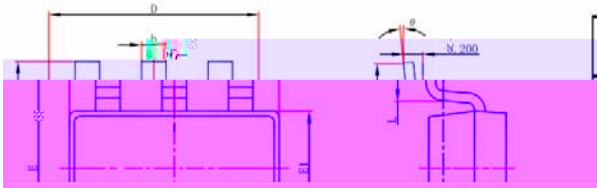


Fig.7 ESD clamping - I/O to GND
(+8kV contact discharge per IEC61000-4-2

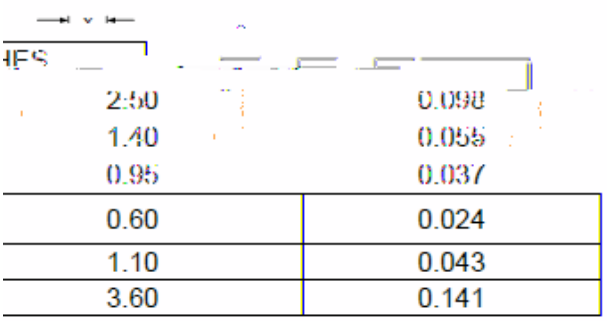


■SOT-23 6L Package Outline Drawing



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	max.	min.	max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045

■ Recommended PCB Layout



2.50	0.098
1.40	0.055
0.95	0.037
0.60	0.024
1.10	0.043
3.60	0.141

DIMENSIONS	
MILLIMETERS	INCH
C	
G	
P	
X	
Y	
Z	

Disclaimer