

Low Capacitance TVS Diode Array

IEC Compliance

- ◆ IEC 61000-4-2 (ESD)
8KV - Contact Discharge
15KV - Air Discharge
- ◆ IEC 61000-4-4 (EFT) 40A (5/50ns)

Application

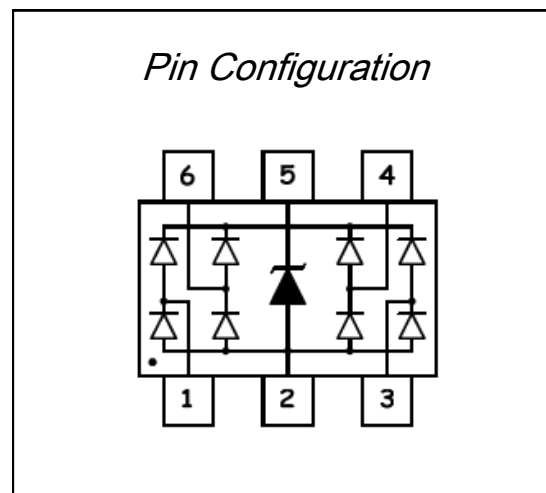
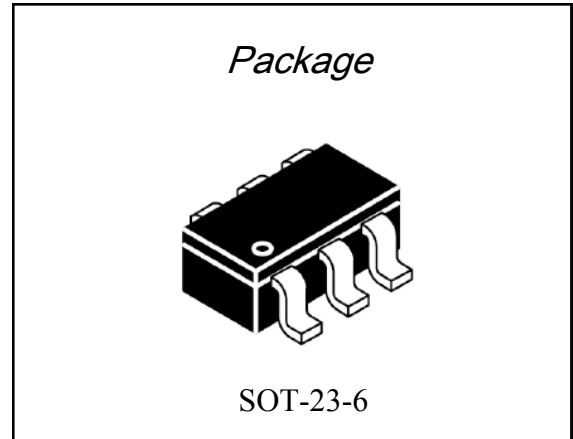
- ◆ Ethernet Application
- ◆ Embedded System
- ◆ Handheld Device
- ◆ Computer

Features

- ◆ 400W Peak Pulse Power
- ◆ Low Clamping Voltage
- ◆ Low Leakage Current
- ◆ Protect 4-Line and Power Bus

Mechanical Characteristics

- ◆ SOT-23-6 Package
- ◆ Weight 16 Milligram (Approximate)
- ◆ Flammability Rating UL94V-0
- ◆ Lead Free Plating
- ◆ Reel Size 7"
- ◆ 3,000 PCS Per Reel



DEVICE CHARACTERISTICS

Maximum Rating			
Parameter	Symbol	Value	Units
Peak Pulse Power (tp=8/20us waveform)	P _{PP}	400	Watt
Lead Soldering Temperature	T _L	260 (10s)	°C
Operating Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C

Electrical Characteristics (@25 °C)							
Part Number	Device Marking	V _{RWM} (Volt)	V _B (Volt)	V _C (Volt)	I _{PP} (A)	I _R (uA)	C _J (pF)
NLSH05-4	S5	5	6	20	20	5	5

8/20us Clamping Characteristics					
8/20us Current (A)	1	5	10	15	20
Clamping Voltage (Volt)	10.5	13	16	18	20

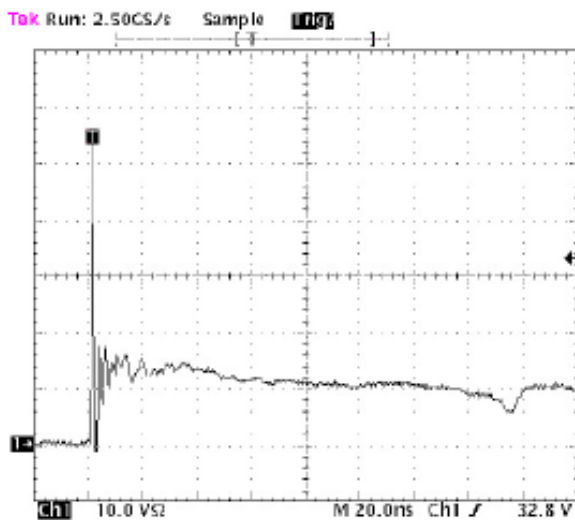


Figure1. Clamping waveform of positive 8KV ESD contact

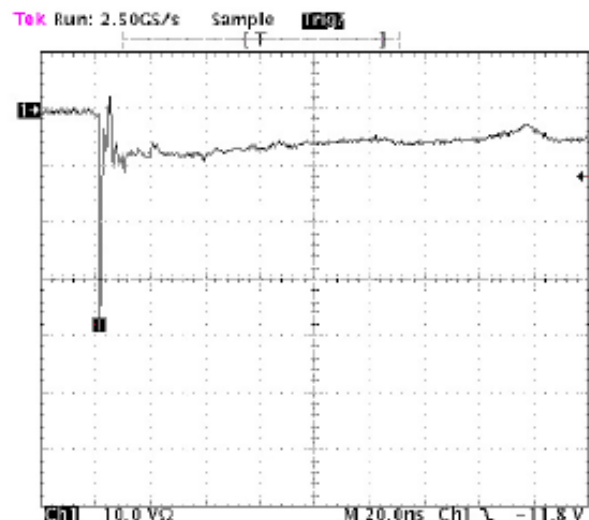
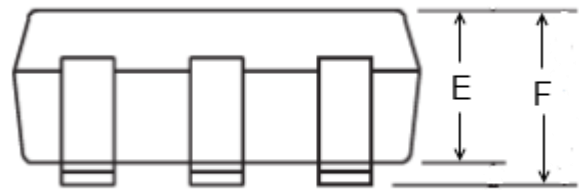
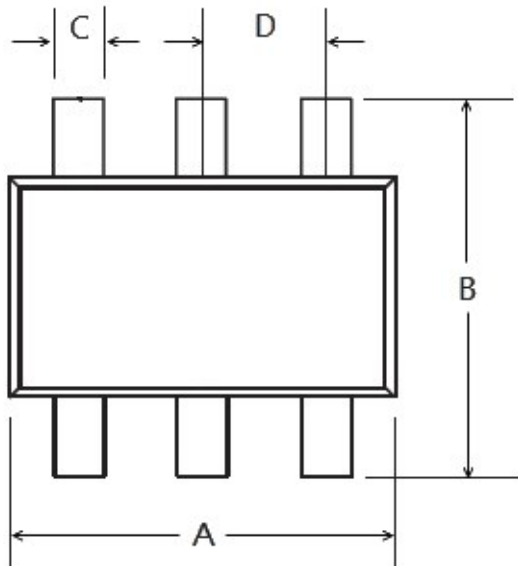


Figure2. Clamping waveform of negative 8KV ESD contact

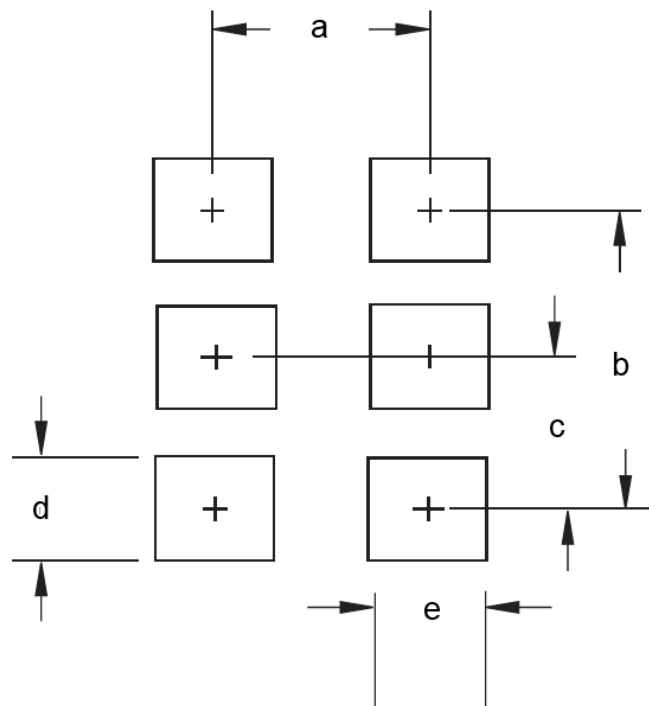
DEVICE OUTLINE

Outline Dimension				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.80	3.10	0.110	0.122
B	2.80TYP		0.110TYP	
C	0.25	0.50	0.010	0.020
D	0.95TYP		0.037TYP	
E	0.90	1.30	0.035	0.051
F	0.90	1.45	0.035	0.057



LAYOUT PAD DIMENSION

Layout PAD Dimension				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
a	2.30	2.50	0.090	0.098
b	1.80	2.00	0.071	0.079
c	0.95TYP		0.037TYP	
d	0.60	0.80	0.024	0.031
e	0.90	1.10	0.035	0.043



Revision History	Modification Description
Rev.1.0	Initial Release
Rev.1.01	Edit Document Layout