

General Purpose 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

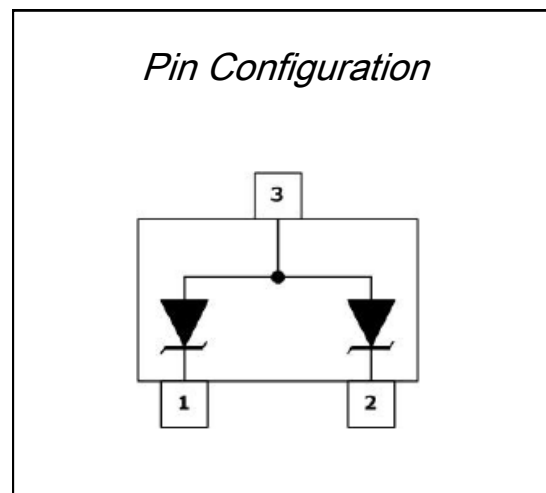
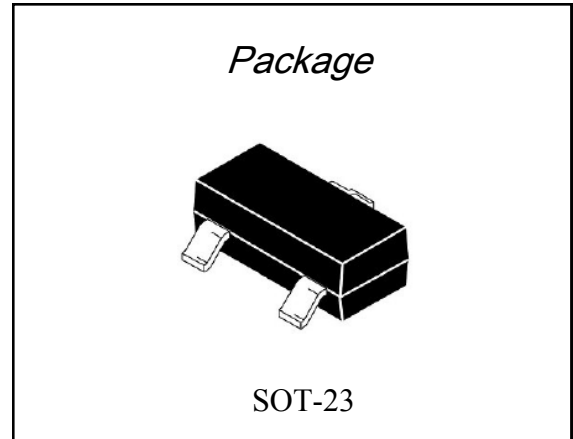
- ◆ DC Power Application
- ◆ Embedded System
- ◆ Handheld Device
- ◆ Computer

Features

- ◆ 350W Peak Pulse Power
- ◆ Low Clamping Voltage
- ◆ Low Leakage Current
- ◆ 2-Line Uni-Directional Protection

Mechanical Characteristics

- ◆ SOT-23 Package
- ◆ Weight 8 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}	350	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)
NLSOT03C	M03	3.3	4	10.9	20	100	400
NLSOT05C	M05	5	6	13.5	17	10	300
NLSOT08C	M08	8	8.5	16.9	12	5	250
NLSOT12C	M12	12	13.3	25.9	11	1	150
NLSOT15C	M15	15	16.7	30	10	1	100
NLSOT24C	M24	24	26.7	49	7	1	88
NLSOT36C	M36	36	40	76.8	5	1	60

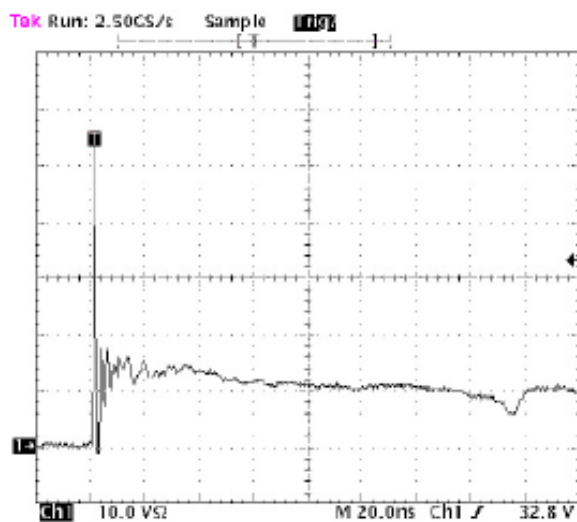


Figure1. Clamping waveform of positive 8KV ESD contact

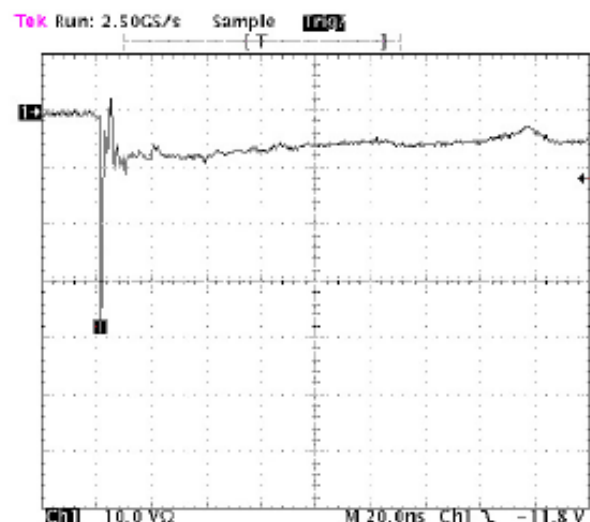
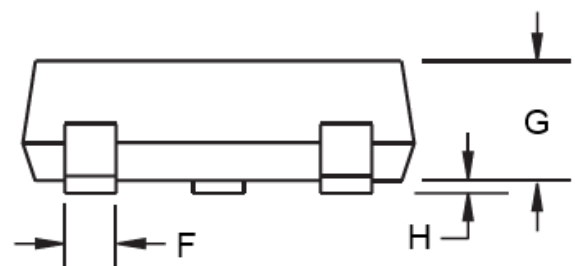
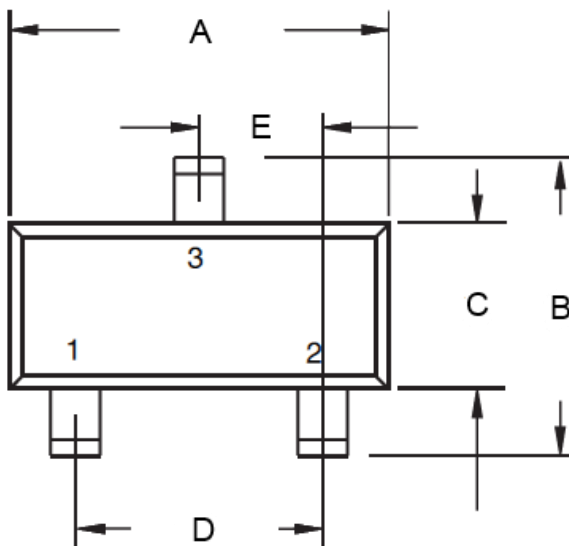


Figure2. Clamping waveform of negative 8KV ESD contact

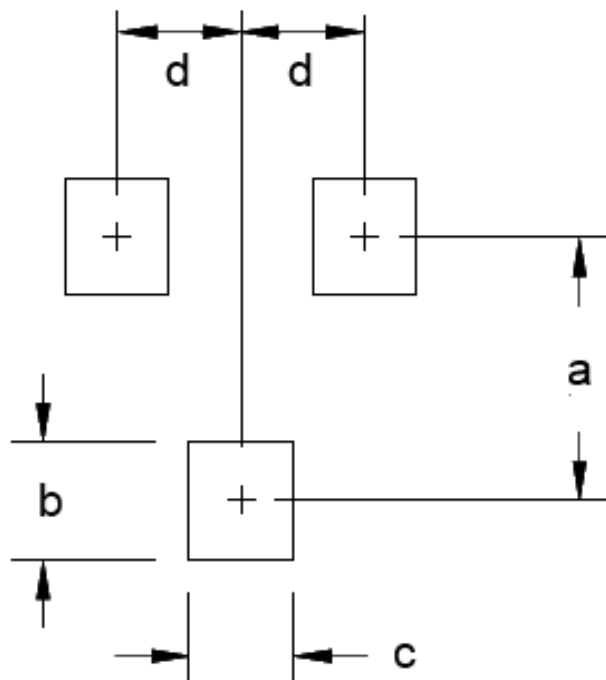
DEVICE OUTLINE

Outline Dimension				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.80	3.10	0.110	0.122
B	2.50TYP		0.098TYP	
C	1.20	1.40	0.010	0.020
D	1.90TYP		0.075TYP	
E	0.95TYP		0.037TYP	
F	0.37	0.50	0.015	0.020
G	0.79	1.10	0.031	0.043
H	0.01	0.1	0.001	0.004



LAYOUT PAD DIMENSION

Layout PAD Dimension				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
a	1.90	2.10	0.075	0.083
b	0.80	1.00	0.031	0.039
c	0.80TYP		0.031TYP	
d	0.85	1.05	0.033	0.041



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