
Low Capacitance TVS Diode Array

Compliance Standard

- ◆ IEC 61000-4-2 (ESD)
20KV - Contact Discharge
25KV - Air Discharge
- ◆ IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ IEC 61000-4-5 (Surge) 4.0 (8/20us)

Applications

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

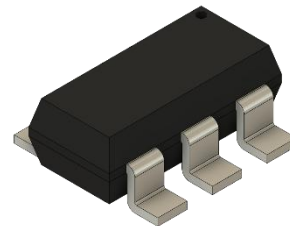
Features

- ◆ 30W Peak Pulse Power
- ◆ Low Clamping Voltage
- ◆ Low Leakage Current
- ◆ 4 Line Protection

Mechanical Characteristics

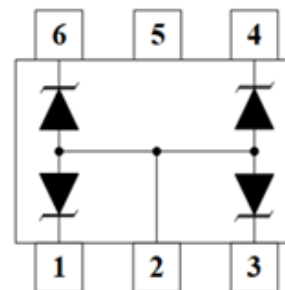
- ◆ SOT23-6 Package
- ◆ Weight 16 Milligram (Approximate)
- ◆ Flammability Rating UL94V-0
- ◆ Lead Free Plating
- ◆ Reel Size 7"
- ◆ 3000 PCS Per Reel

Package



SOT23-6

Pin Configuration



DEVICE CHARACTERISTICS

Maximum Rating			
Parameter	Symbol	Value	Unit
Peak Pulse Power	P _{PP}	30	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	Marking	V _{RWM} (Volt)	V _B (Volt)	V _C (Volt)	I _{PP} (A)	I _R (uA)	C _J (pF)
NLSQV05LC	S4P	5.0	6.0	8.0	4.0	1.0	0.5



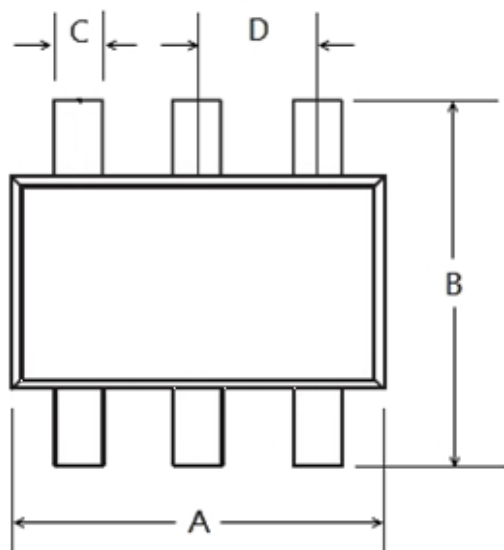
Figure1. Clamping waveform of positive 8KV ESD contact



Figure2. Clamping waveform of negative 8KV ESD contact

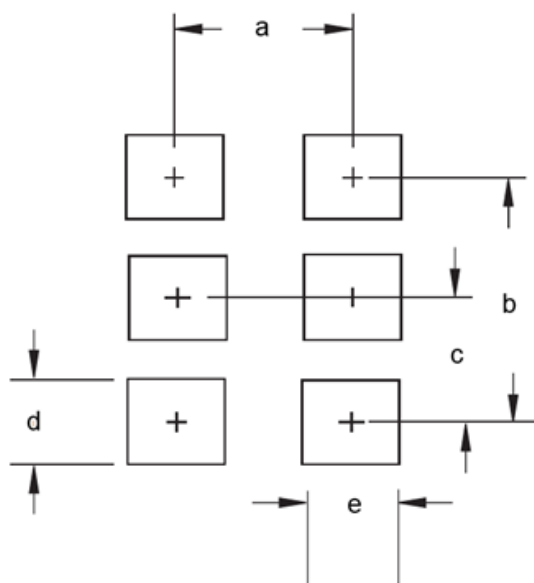
DEVICE OUTLINE

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



LAYOUT PAD DIMENSION

<i>Layout PAD Dimension</i>				
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		0.95TYP	
d	0.60	0.80	0.024	0.031
e	0.90	1.10	0.035	0.043



<i>Revision History</i>	<i>Description</i>
v2.0	Re-organize datasheet layout