
Low Capacitance TVS Diode Array

Compliance Standard

- ◆ IEC 61000-4-2 (ESD)
30KV - Contact Discharge
30KV - Air Discharge
- ◆ IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ IEC 61000-4-5 (Surge) 30.0 (8/20us)

Applications

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

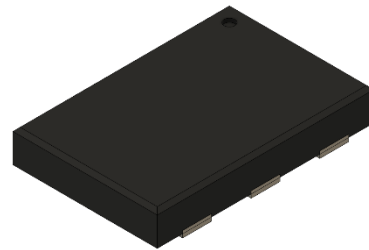
Features

- ◆ 600W Peak Pulse Power
- ◆ Low Clamping Voltage
- ◆ Low Leakage Current
- ◆ 4 Line Protection

Mechanical Characteristics

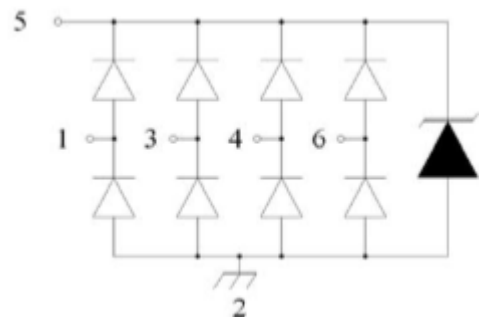
- ◆ DFN-3020P6 Package
- ◆ Weight 12 Milligram (Approximate)
- ◆ Flammability Rating UL94V-0
- ◆ Lead Free Plating
- ◆ Reel Size 7"
- ◆ 3000 PCS Per Reel

Package



DFN-3020P6

Pin Configuration



DEVICE CHARACTERISTICS

Maximum Rating			
Parameter	Symbol	Value	Unit
Peak Pulse Power	P _{PP}	600	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)
NLSH0514N	LC0514P6	5.0	6.0	20.0	30.0	1.0	5.0



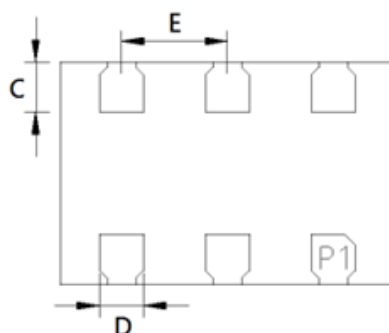
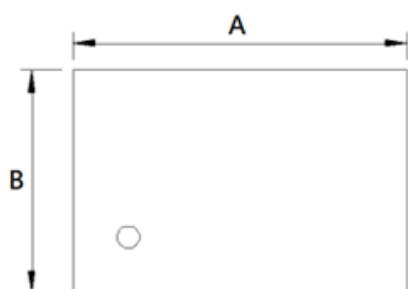
Figure1. Clamping waveform of positive 8KV ESD contact



Figure2. Clamping waveform of negative 8KV ESD contact

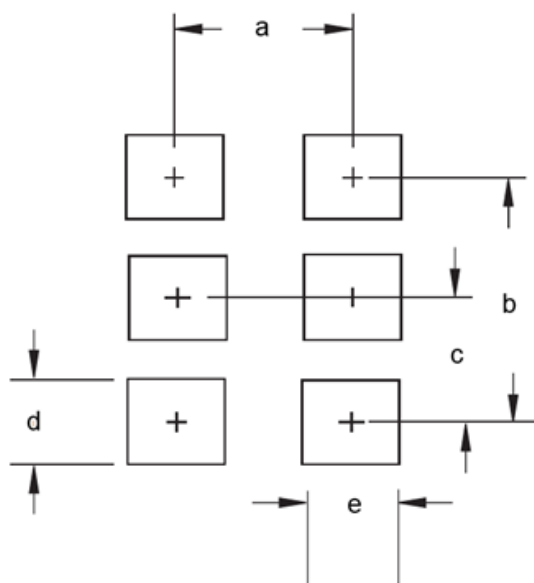
DEVICE OUTLINE

Outline Dimension				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.90	3.10	0.114	0.122
B	1.90	2.10	0.074	0.082
C	0.45TYP		0.45TYP	
D	0.40TYP		0.40TYP	
E	0.95TYP		0.95TYP	
F	0.45	0.55	0.017	0.022
G	0.00	0.05	0.000	0.002



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