
Low Capacitance TVS Diode Array

Compliance Standard

- ◆ IEC 61000-4-2 (ESD)
30 - Contact Discharge
30 - Air Discharge
- ◆ IEC 61000-4-4 (EFT) 40A (5/50ns)
- ◆ IEC 61000-4-5 (Surge) 17.0 (8/20us)

Applications

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

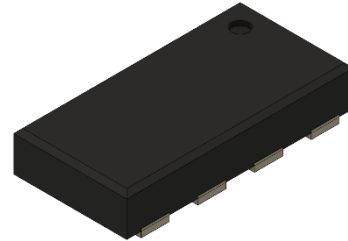
Features

- ◆ 250W Peak Pulse Power
- ◆ Low Clamping Voltage
- ◆ Low Leakage Current
- ◆ 2 Pair Line to Line Protection

Mechanical Characteristics

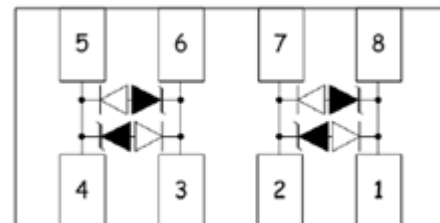
- ◆ DFN-2010P8 Package
- ◆ Weight 1 Milligram (Approximate)
- ◆ Flammability Rating UL94V-0
- ◆ Lead Free Plating
- ◆ Reel Size 7"
- ◆ 3000 PCS Per Reel

Package



DFN-2010P8

Pin Configuration



DEVICE CHARACTERISTICS

Maximum Rating			
Parameter	Symbol	Value	Unit
Peak Pulse Power	P_{PP}	250	Watt
Lead Soldering Temperature	T_L	260 (10s)	°C
Operating Temperature Range	T_J	-40~125	°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)
NLC33SP8	U33	3.3	4.0	15.0	17.0	0.05	1.3

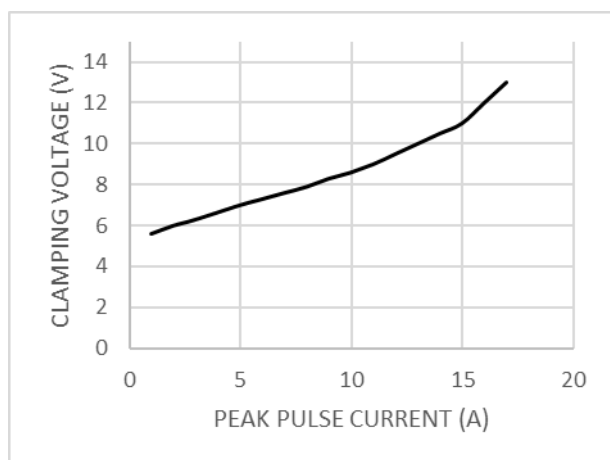


Figure1. $V_C - I_{PP}$ Characteristic

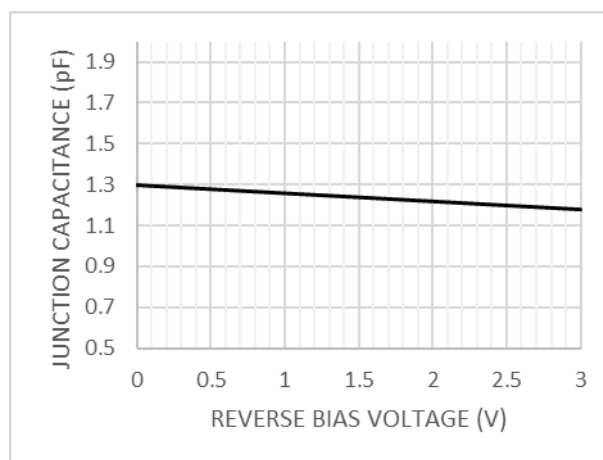
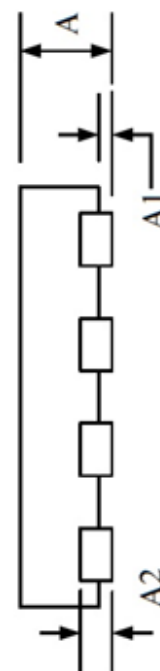
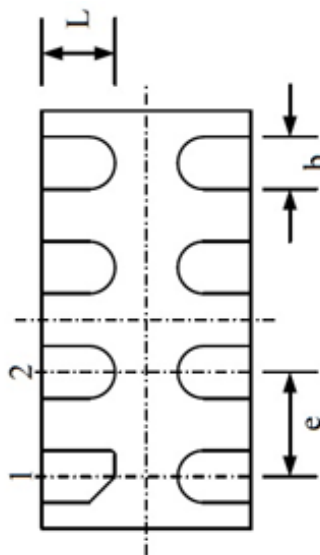
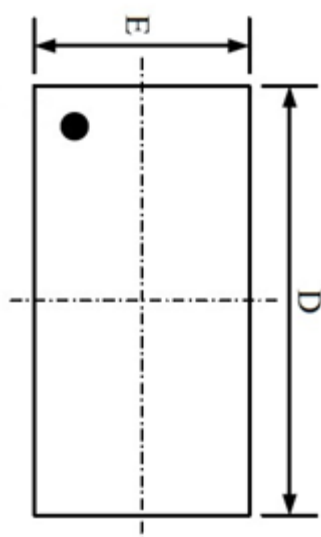


Figure2. $C_J - V_R$ Plot

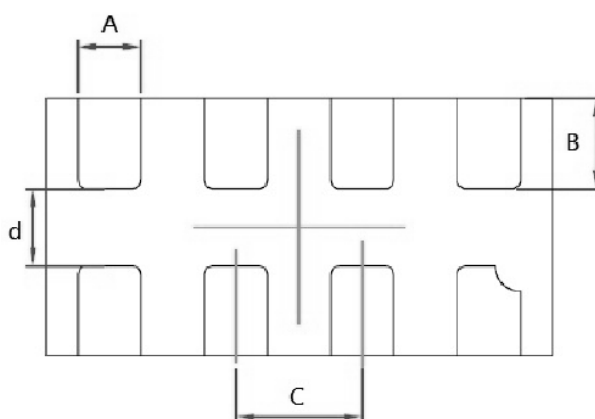
DEVICE OUTLINE

Outline Dimension				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	0.450	0.550	0.017	0.022
A1	0.000	0.050	0.000	0.002
A2	0.150REF		0.006REF	
D	1.900	2.100	0.075	0.083
E	0.900	1.100	0.035	0.043
L	0.300	0.400	0.011	0.016
b	0.200	0.300	0.008	0.012
e	0.500TYP		0.020TYP	



LAYOUT PAD DIMENSION

<i>Layout PAD Dimension</i>				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	0.25	0.35	0.010	0.014
B	0.45	0.55	0.017	0.022
C	0.50TYP		0.020TYP	
d	0.25	0.35	0.010	0.014



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