

## QUAD TVS/ZENER ARRAY FOR ESD PROTECTION

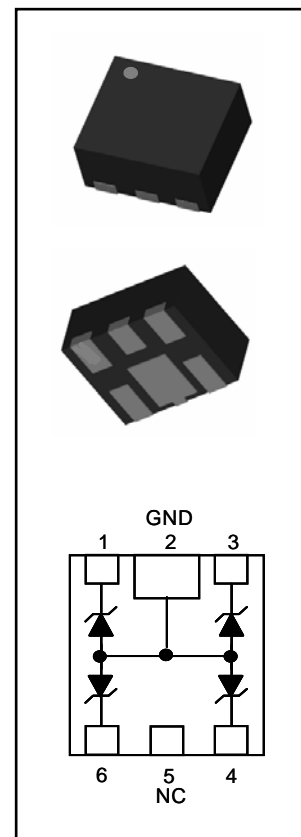
This Quad TVS/Zener Array family have been designed to protect sensitive equipment against ESD in CMOS circuitry operating at 5V. This TVS array offers an integrated solution to protect up to 4 data lines in applications, where the board space is a premium, in a Quad Flat no-Lead package that only occupies an area of 1.8 sq mm.

### SPECIFICATION FEATURES

- IEC61000-4-2 ESD 20kV air, 15kV Contact Compliance
- Low Leakage Current, Maximum of 1μA at rated voltage
- Maximum Capacitance of 35pF per device at 0Vdc 1MHz
- Peak Power Dissipation of 40W under 8/20μs Waveform
- Quad Flat No Lead package QFN (1.2x1.5 sq mm, Height: 0.75mm)
- Lead Free Package 100% Tin Plating, Matte finish

### APPLICATIONS

- Personal Digital Assistant (PDA)
- Digital Cameras
- Portable Instrumentation
- Mobile Phones and Accessories
- MP3 Players



### MAXIMUM RATINGS (Per Device)

Rating	Symbol	Value	Units
Peak Pulse Power (8/20μs Waveform)	P <sub>PP</sub>	40	W
Peak Pulse Current (8/20μs Waveform)	I <sub>PPM</sub>	4.5	A
ESD Voltage (HBM Per MIL STD883C - Method 3015-6)	V <sub>ESD</sub>	25	kV
Operating Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +150	°C

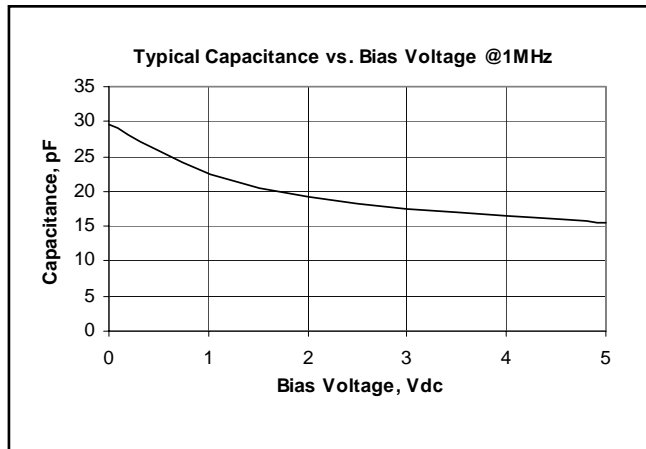
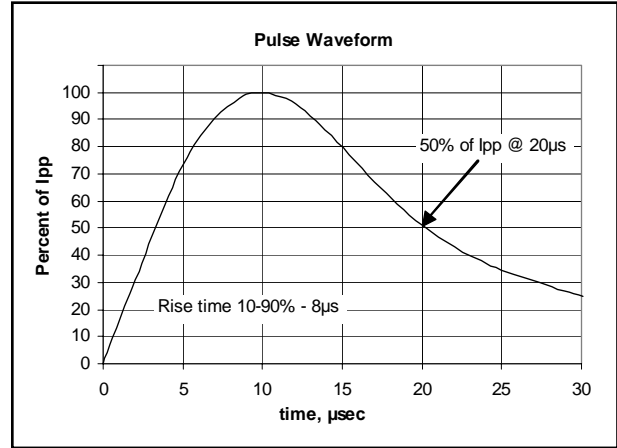
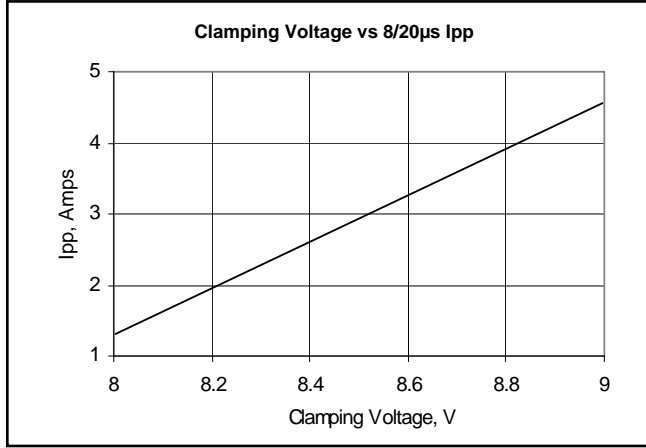
### ELECTRICAL CHARACTERISTICS (Per Device) T<sub>j</sub> = 25°C

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V <sub>WRM</sub>				5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> = 1mA	6			V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 5V			1	μA
Clamping Voltage (8/20μs)	V <sub>C</sub>	I <sub>pp</sub> = 4A		8.81	9	V
Off State Junction Capacitance	C <sub>j</sub>	0 Vdc Bias f = 1MHz between I/O lines and		30	35	pF



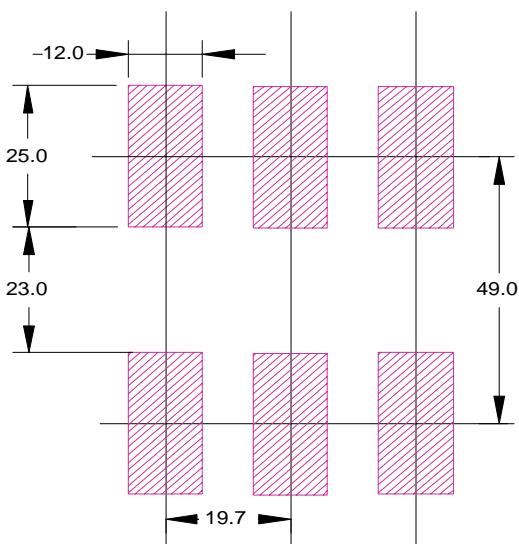
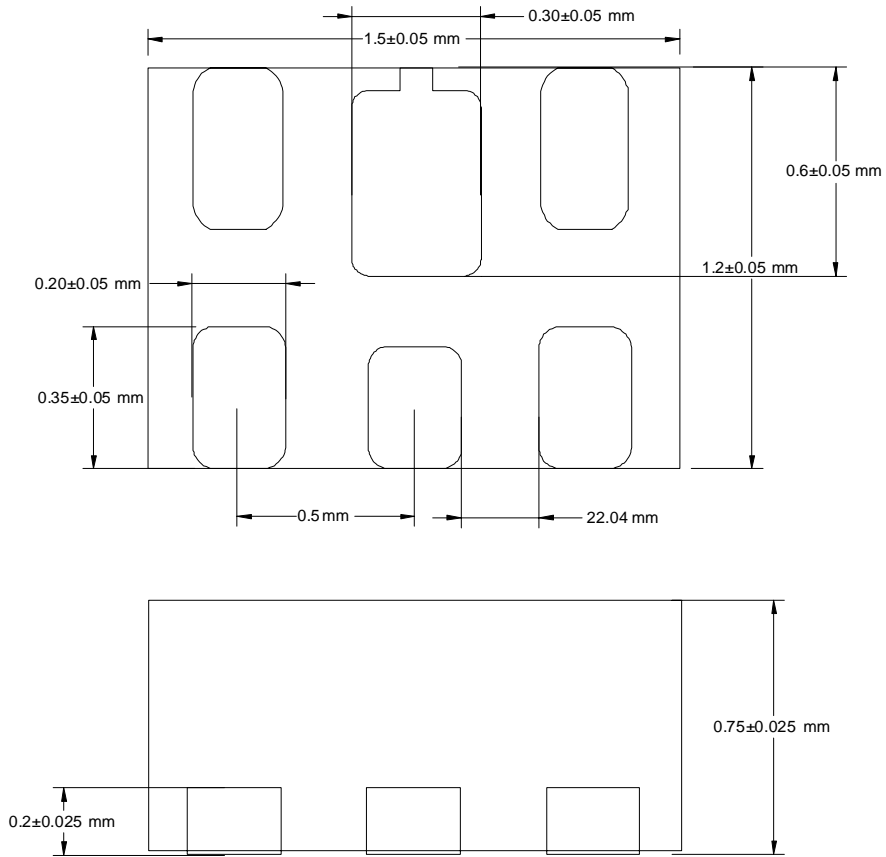
TYPICAL CHARACTERISTIC CURVES (Per Device) Tj = 25°C

PRELIMINARY

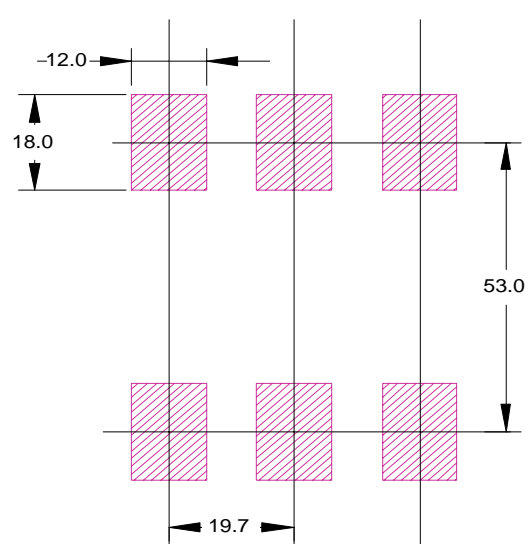


PACKAGE DIMENSIONS AND SUGGESTED PAD LAYOUT

PRELIMINARY



Suggested Pad Layout (in mils)



Alternate Pad Layout SOT666 (in mils)