

## QUAD TVS/ZENER ARRAY FOR ESD AND LATCH-UP PROTECTION

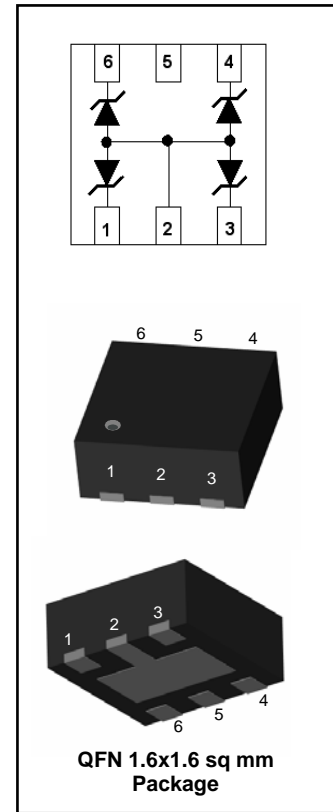
This Quad TVS/Zener Array has been designed to Protect Sensitive Equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating at 5Vdc and below. This TVS array offers an integrated solution to protect up to four data lines where the board space is a premium.

### SPECIFICATION FEATURES

- **100W Power Dissipation (8/20 $\mu$ s Waveform)**
- **Low Leakage Current, Maximum of 0.5 $\mu$ A @ 5Vdc**
- **Very Low Clamping Voltage, Max of 10V @ 9Apk 8/20 $\mu$ s**
- **IEC61000-4-2 ESD 20kV air, 15kV Contact Compliance**
- **Max off state Capacitance of 90pF @ 0Vdc 1 MHz**
- **New SMT package QFN 1.6mm x 1.6mm; Max Height of 0.75mm**
- **Same Footprint compared to the SOT666 or EIAJ SC-89**

### APPLICATIONS

- **Personal Digital Assistant (PDA)**
- **SIM Card Port Protection (Mobile Phone)**
- **Portable Instrumentation**
- **Mobile Phones and Accessories**
- **Memory Card Port Protection**



### MAXIMUM RATINGS (Per Device)

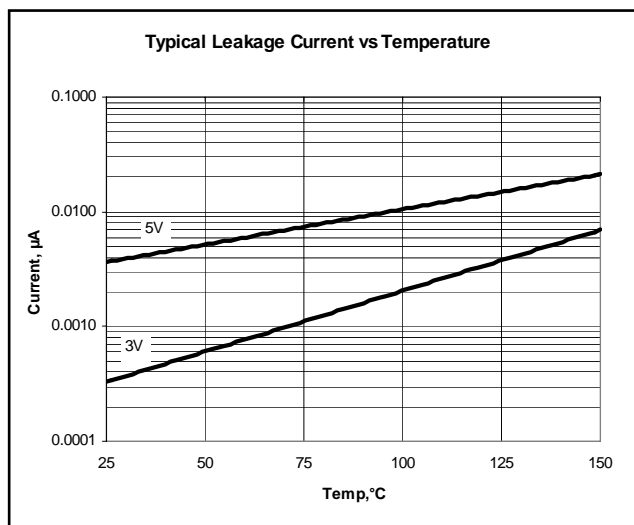
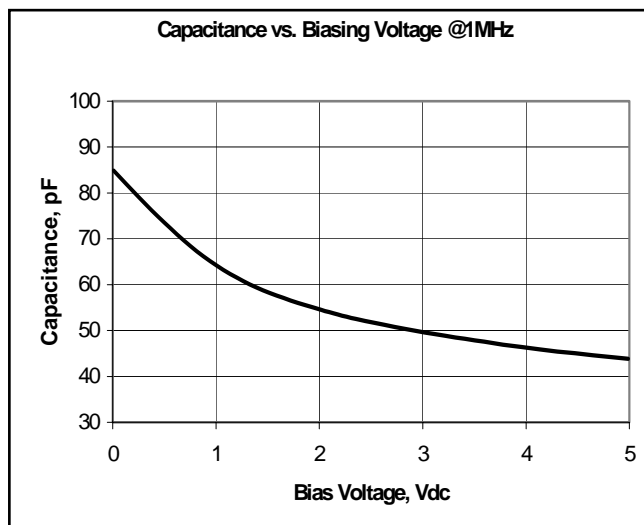
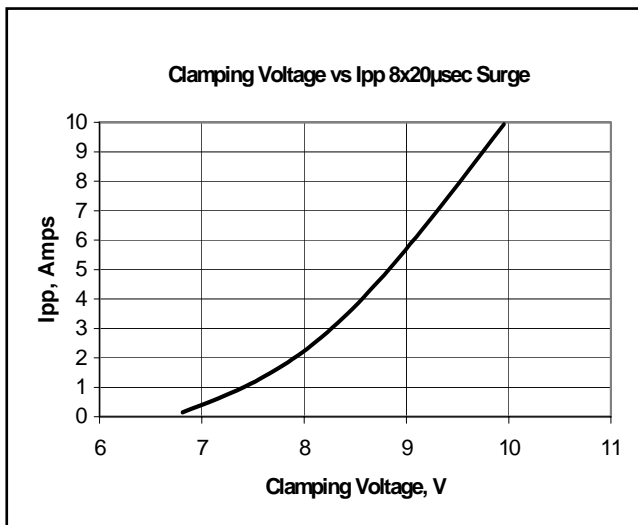
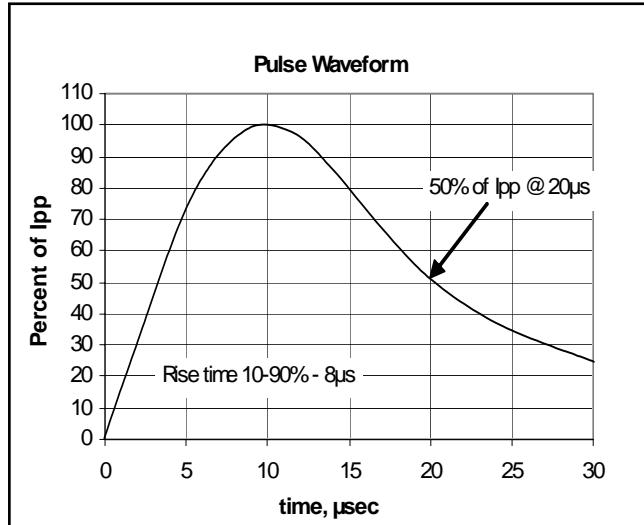
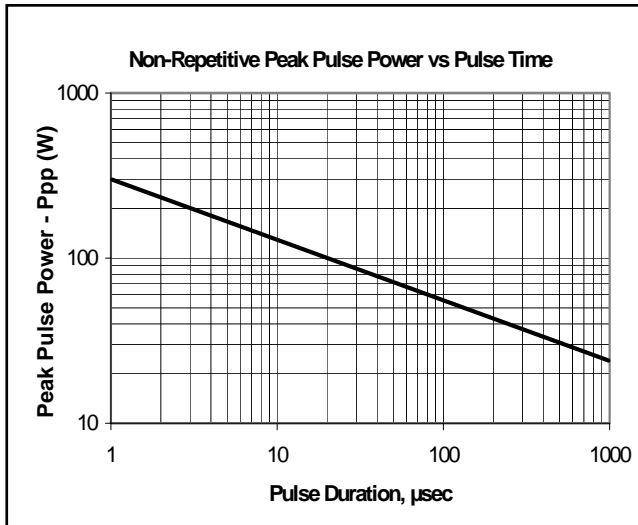
Rating	Symbol	Value	Units
Peak Pulse Power (8/20 $\mu$ s Waveform)	$P_{pp}$	100	W
Peak Pulse Current (8/20 $\mu$ s Waveform)	$I_{pp}$	10	A
ESD Voltage (HBM)	$V_{ESD}$	>25	kV
Operating Temperature Range	$T_J$	-55 to +150	$^{\circ}$ C
Storage Temperature Range	$T_{stg}$	-55 to + 150	$^{\circ}$ C

### ELECTRICAL CHARACTERISTICS (Per Device) $T_j = 25^{\circ}$ C

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	$V_{WRM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR} = 1 \text{ mA}$	6		7.2	V
Reverse Leakage Current	$I_R$	$V_R = 5\text{V}$			0.5	$\mu$ A
Clamping Voltage (8/20 $\mu$ s)	$V_c$	$I_{pp} = 5\text{A}$			9	V
Clamping Voltage (8/20 $\mu$ s)	$V_c$	$I_{pp} = 9\text{A}$			10	V
Off State Junction Capacitance	$C_j$	0 Vdc Bias f = 1MHz Between I/O pins and pin 2			90	pF
Off State Junction Capacitance	$C_j$	5 Vdc Bias f = 1MHz Between I/O pins and pin 2			45	pF

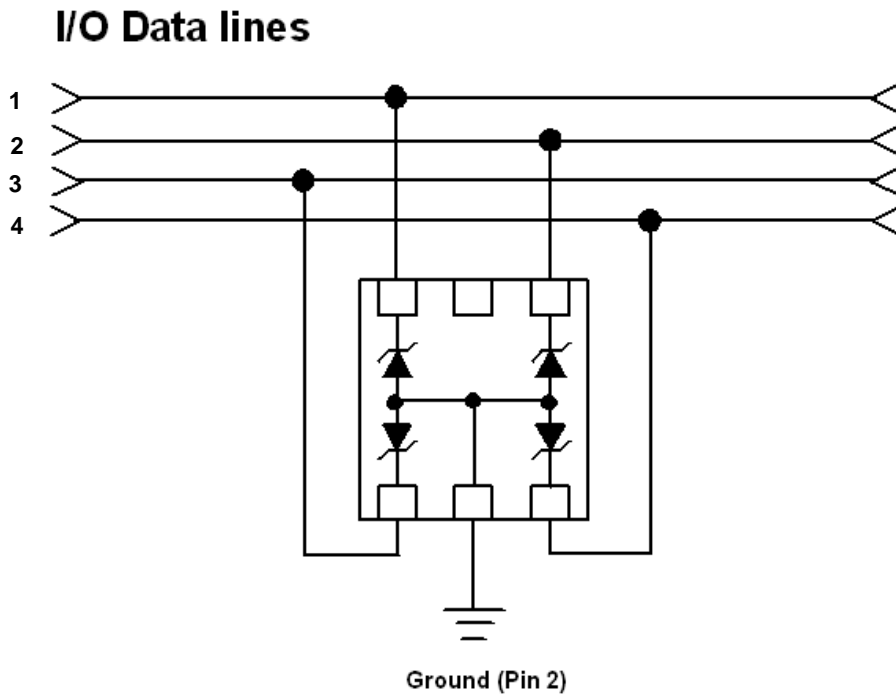
TYPICAL CHARACTERISTICS 25°C unless otherwise noted

PRELIMINARY



TYPICAL APPLICATION EXAMPLE

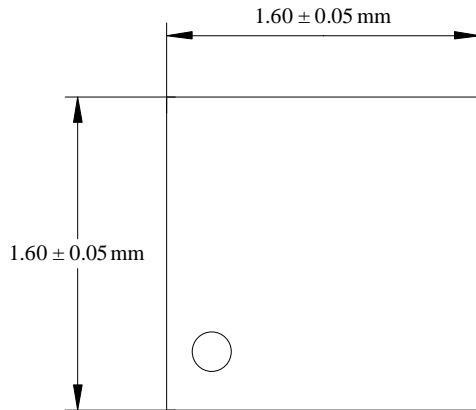
PRELIMINARY



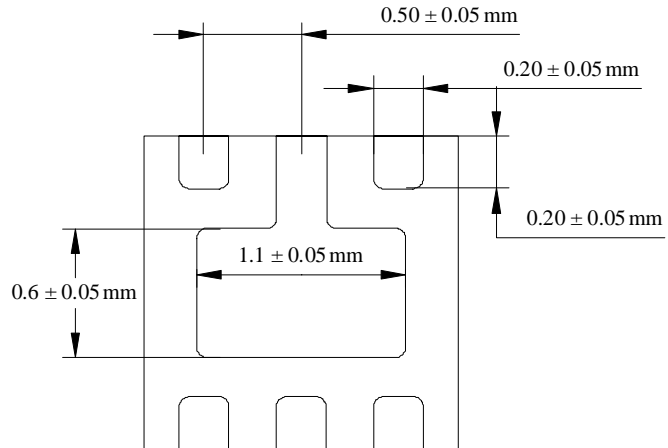


PACKAGE DIMENSIONS AND SUGGESTED BOND PAD LAYOUT

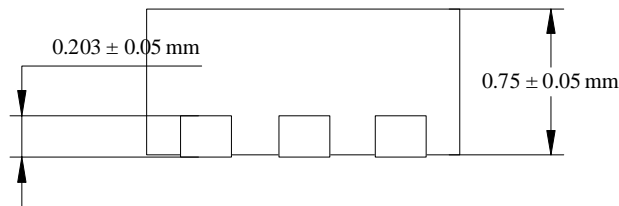
TOP VIEW



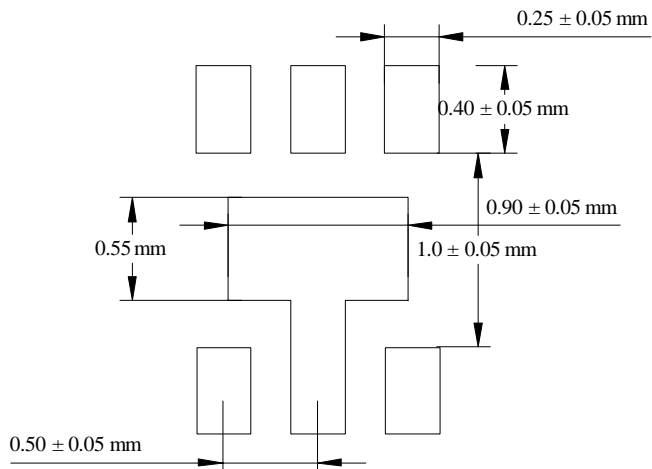
BOTTOM VIEW



SIDE VIEW



PREFERRED



ALTERNATE

