

5-TVS/ZENER ARRAY FOR ESD AND LATCH-UP PROTECTION

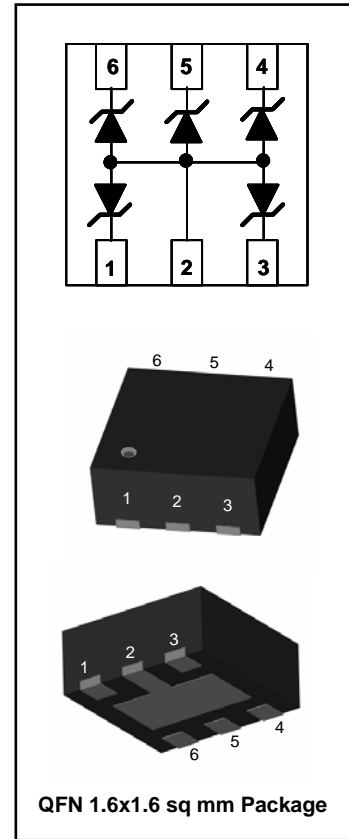
This 5-TVS/Zener Array has been designed to Protect Sensitive Equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating at 5Vdc and below. This TVS array offers an integrated solution to protect up to 5 data lines where the board space is a premium.

SPECIFICATION FEATURES

- 100W Power Dissipation (8x20μsec Waveform)
- Low Leakage Current, Maximum of 2μA @ 5Vdc
- Very Low Clamping Voltage, Max of 10V @ 9A_{pk} 8x20μsec
- 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 SOT563

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 (8x20μsec Waveform)	P_{pp}	100	W
Peak Pulse Current (8x20μsec Waveform)	I_{pp}	10	A
ESD Voltage (HBM)	V_{ESD}	>25	kV
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{stg}	-55 to + 150	°C

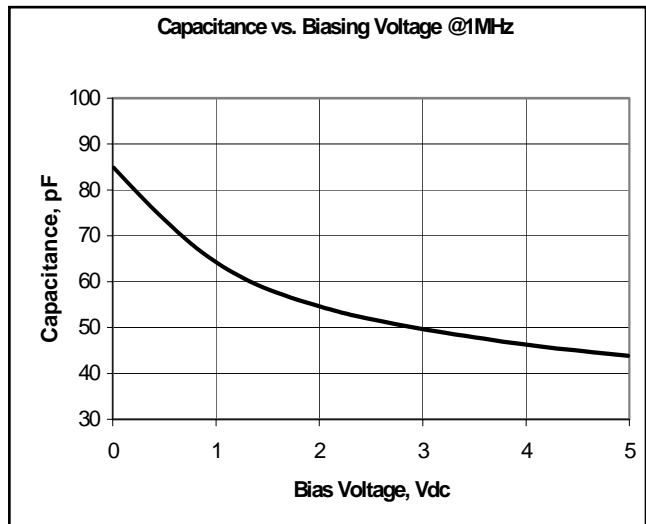
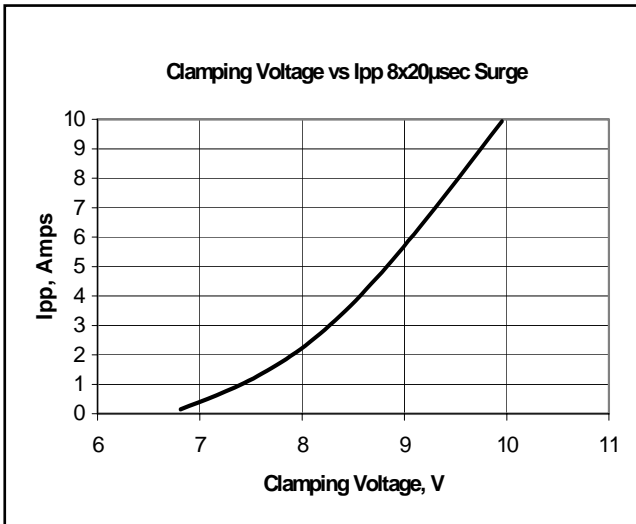
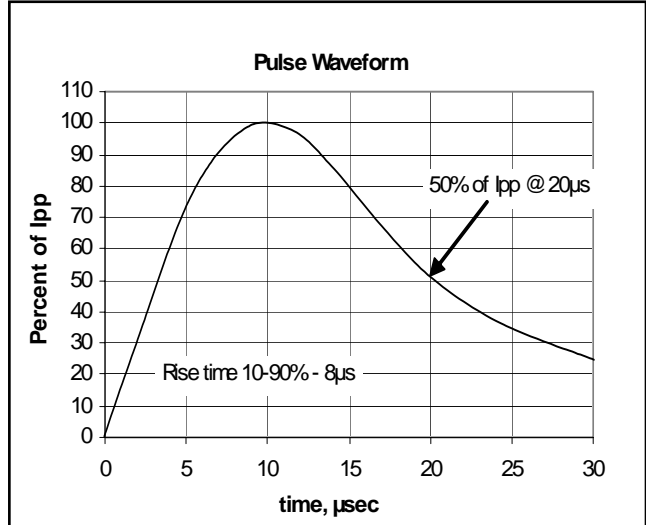
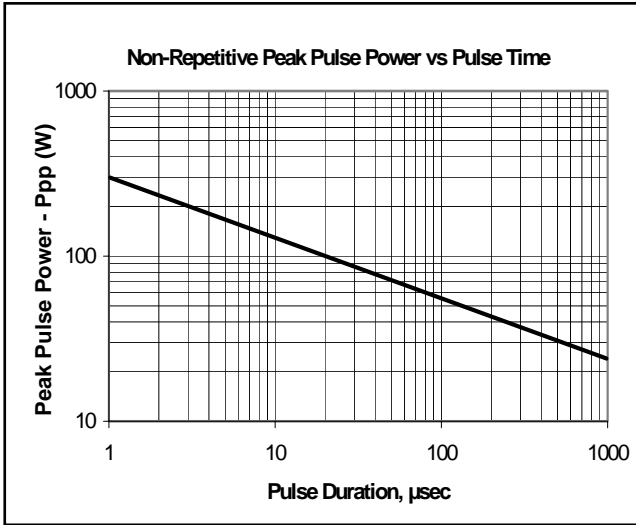
ELECTRICAL CHARACTERISTICS (Per Device) $T_J = 25^\circ\text{C}$

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	$V_R = 5\text{V}$			2.0	μA
Clamping Voltage (8x20μsec)	V_{cl}	$I_{pp} = 5\text{A}$			9	V
Clamping Voltage (8x20μsec)	V_{cl}	$I_{pp} = 9\text{A}$			10	V
Off State Junction Capacitance	C_j	0 Vdc Bias $f = 1\text{MHz}$ Between I/O pins and pin 2			90	pF
Off State Junction Capacitance	C_j	5 Vdc Bias $f = 1\text{MHz}$ Between I/O pins and pin 2			45	pF



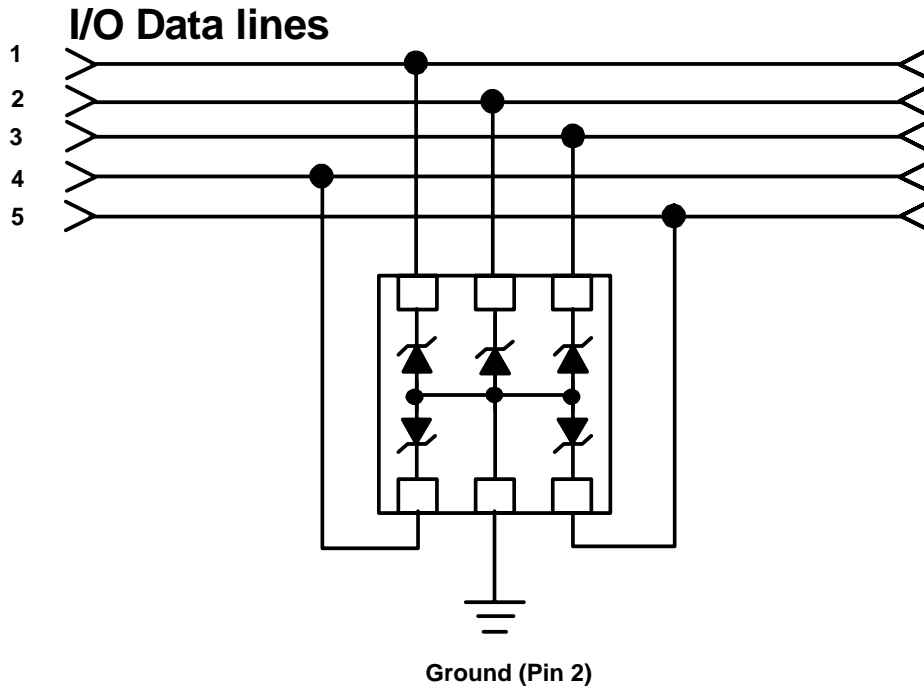
TYPICAL CHARACTERISTICS 25°C unless otherwise noted

PRELIMINARY



TYPICAL APPLICATION EXAMPLE

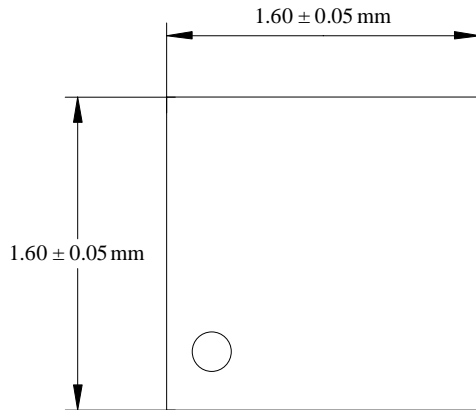
PRELIMINARY



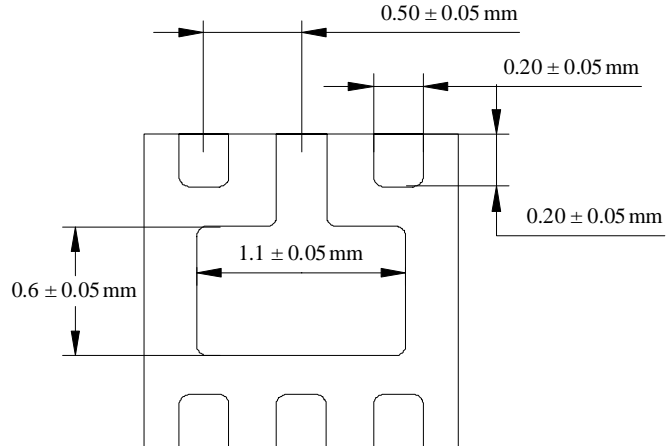


PACKAGE DIMENSIONS AND SUGGESTED BOND PAD LAYOUT

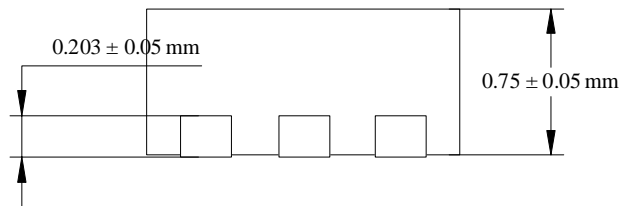
TOP VIEW



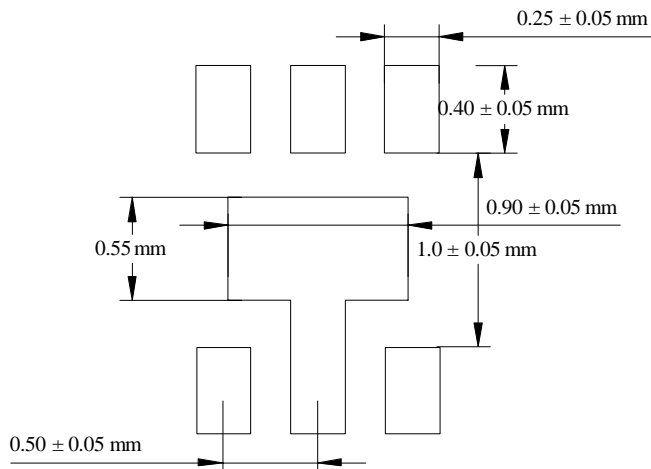
BOTTOM VIEW



SIDE VIEW



PREFERRED



ALTERNATE

