

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

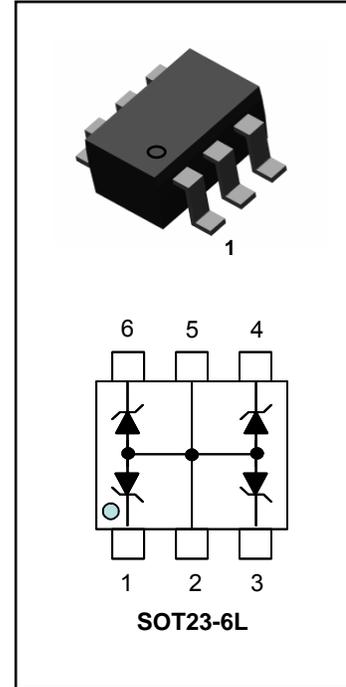
This Quad TVS/Zener Array family have been designed to Protect Sensitive Equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating in the 3.0Vdc. This TVS array offers an integrated solution to protect up to 4 data lines where the board space is a premium.

### SPECIFICATION FEATURES

- 150W (8/20 $\mu$ s), 24W (10/1000 $\mu$ s) Power Dissipation
- Low Leakage Current, Maximum of 2 $\mu$ A at rated voltage
- Very Low Clamping Voltage
- IEC61000-4-2 ESD 20kV air, 15kV Contact Compliance
- Industry Standard Surface Mount Package SOT23-6L
- 100% Tin Matte Finish (RoHS Compliance)
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### APPLICATIONS

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



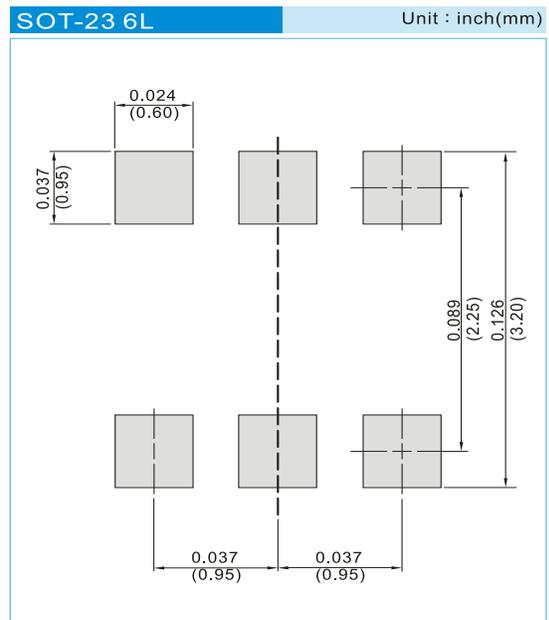
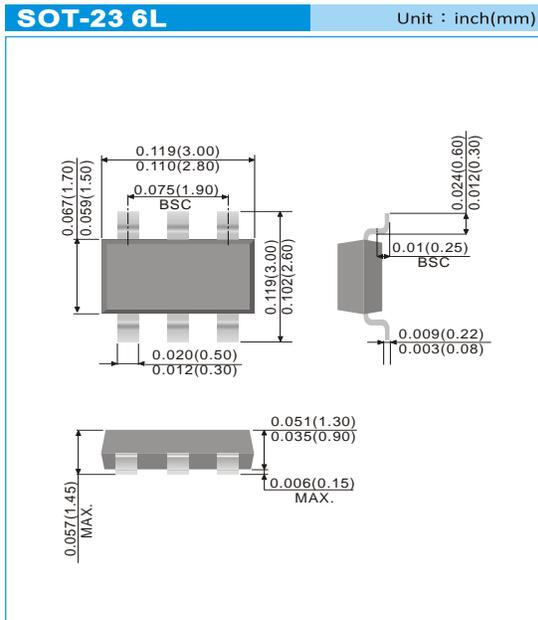
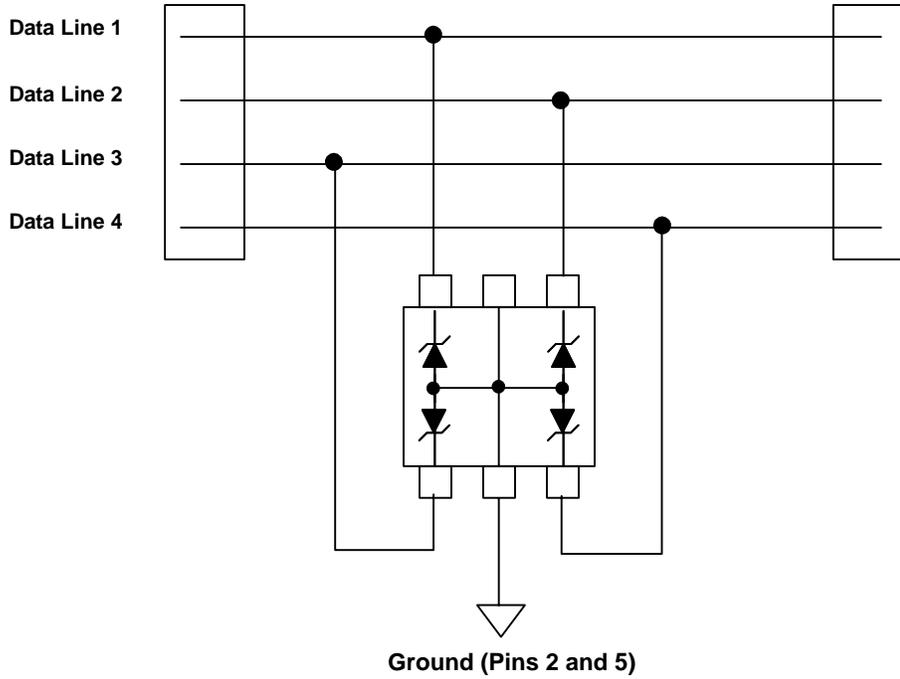
### MAXIMUM RATINGS (Per Device)

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 $\mu$ s Waveform)	$P_{pp}$	150	W
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	$V_{WRM}$				3.0	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR} = 1$ mA	5.3	5.6	5.88	V
Reverse Leakage Current	$I_R$	$V_R = 3.0$ V			2	$\mu$ A
Clamping Voltage (8/20 $\mu$ s)	$V_C$	$I_{pp} = 5$ Amps			8	V
Clamping Voltage (8/20 $\mu$ s)	$V_C$	$I_{pp} = 10$ Amps			9.1	V
Off State Junction Capacitance	$C_j$	0 Vdc Bias f = 1MHz Between I/O pins and pin 2,5			265	pF
Off State Junction Capacitance	$C_j$	3 Vdc Bias f = 1MHz Between I/O pins and pin 2,5			160	pF

TYPICAL APPLICATION EXAMPLE AND PACKAGE DIMENSIONS



**Part No\_packing code\_Version**

PJQA5V6\_R1\_00001  
 PJQA5V6\_R2\_00001  
 PJQA5V6\_S1\_00001  
 PJQA5V6\_S2\_00001

For example :



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			

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