DATA SHEET

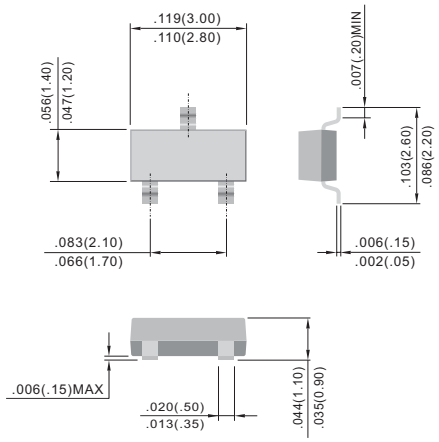
PJMBZ5V6/6V2/6V8

DUAL TVS ZENER FOR ESD / TRANSIENT PROTECTION

VOLTAGE 5.6 to 6.2 Volts **POWER** 150 Watts **SOT-23** Unit: inch (mm)

FEATURES

- Working Peak Reverse Voltage Range - 5.6 to 6.8V
- Maximum Leakage Current of 5uA
- IEC61000-4-2 Compliance 15kV Air, 8kV Contact Discharge
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request



APPLICATIONS

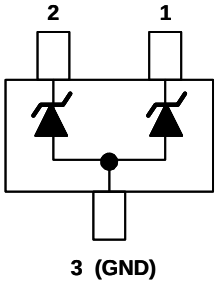
- Data Transmission Line Ports
- Computer Monitor Interface Port Protection
- Portable Consumer Electronics
- Instrumentation Equipment

MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.008 gram
- Marking: UA/UB/UC

MAXIMUM RATINGS

PARAMETER	Symbol	Value	Units
Peak Pulse Power 8x20 usec Waveform Peak Pulse Power 10x1000 usec Waveform	P_{PP}	150 25	W
ESD Voltage (HBM)	V_{ESD}	>25	kV
Lead Soldering Temperature (max 10 secs)	T_L	260	°C
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150	°C



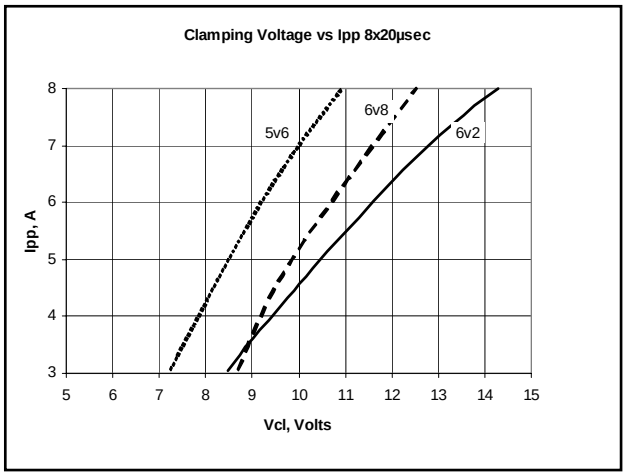
ELECTRICAL CHARACTERISTICS Tj = 25°C

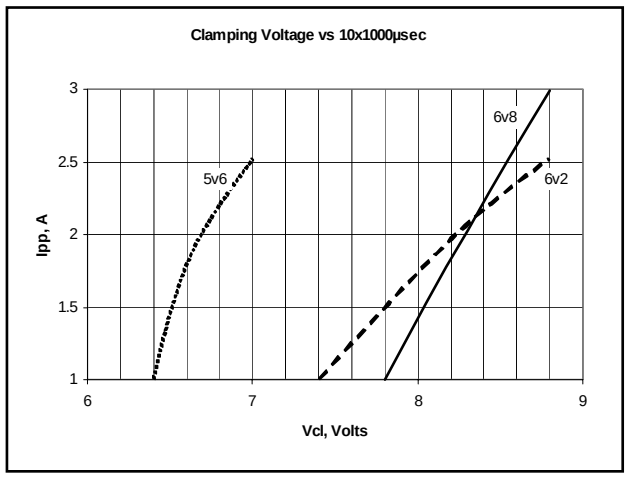
PJMBZ5V6						
PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	3.0	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1.0 mA I_{BR}=20 mA	5.32	5.2 5.6	5.88	V
Reverse Leakage Current	I_R	V_R=3.0V	-	-	5.0	uA
Clamping Voltage (8x20 usec)	V_{CL}	I_{PP}=5.0 Amps	-	-	9.0	V
Clamping Voltage (10x1000 usec)	Vcl	I_{PP}=2.0 Amps	-	-	7.0	V
Maximum Peak Pulse Current	I_{PP}	8x20 usec Waveform	-	-	8.0	A
Off State Junction Capacitance	C_J	0 Vdc Bias f=1MHz Between I/O pins and pin 3	-	-	90	pF

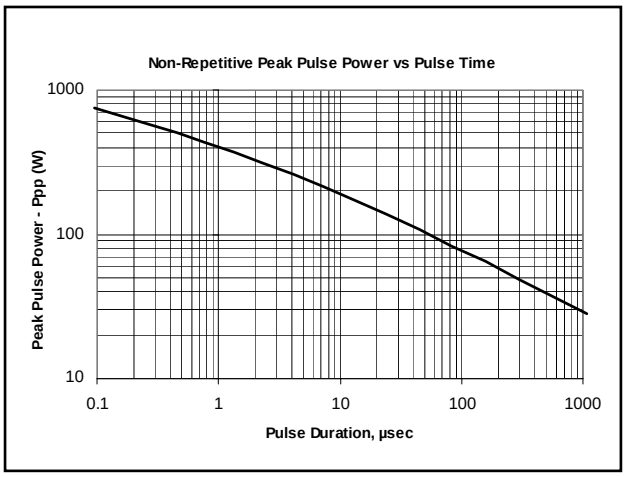
PJMBZ6V2						
PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	3.0	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1.0 mA I_{BR}=20 mA	5.89	6.2	6.51 6.6	V
Reverse Leakage Current	I_R	V_R=3.0V	-	-	0.5	uA
Clamping Voltage (8x20 usec)	Vcl	I_{PP}=5.0 Amps	-	-	11	V
Clamping Voltage (10x1000 usec)	Vcl	I_{PP}=2.0 Amps	-	-	8.5	V
Maximum Peak Pulse Current	I_{PP}	8x20 usec Waveform	-	-	5.0	A
Off State Junction Capacitance	C_J	0 Vdc Bias f=1MHz Between I/O pins and pin 3	-	-	70	pF

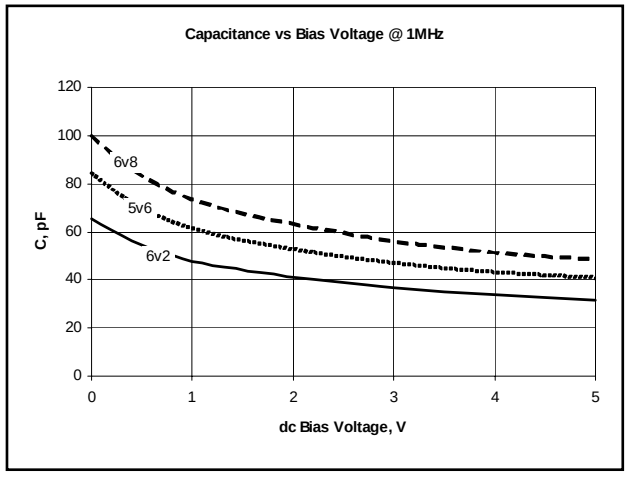
PJMBZ6V8						
PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	4.5	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1.0 mA I_{BR}=20 mA	6.46	6.8	7.14 7.30	V
Reverse Leakage Current	I_R	V_R=4.5V	-	-	0.5	uA
Clamping Voltage (8x20 usec)	V_{CL}	I_{PP}=5.0 Amps	-	-	10	V
Clamping Voltage (10x1000 usec)	Vcl	I_{PP}=2.0 Amps	-	-	9.0	V
Maximum Peak Pulse Current	I_{PP}	8x20 usec Waveform	-	-	8.0	A
Off State Junction Capacitance	C_J	0 Vdc Bias f=1MHz Between I/O pins and pin 3	-	-	100	pF

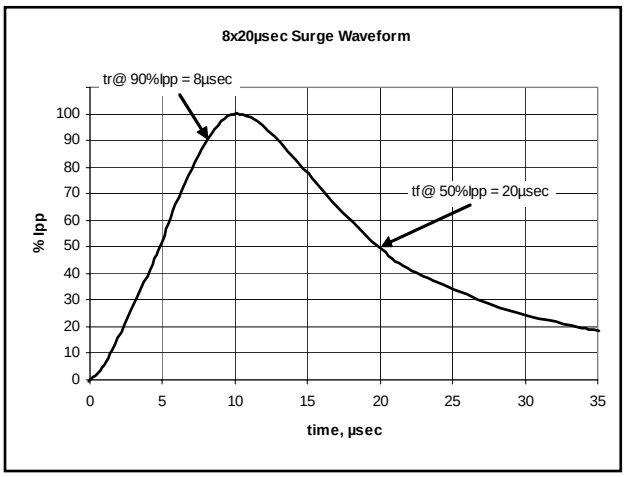
TYPICAL CHARACTERISTIC CURVES

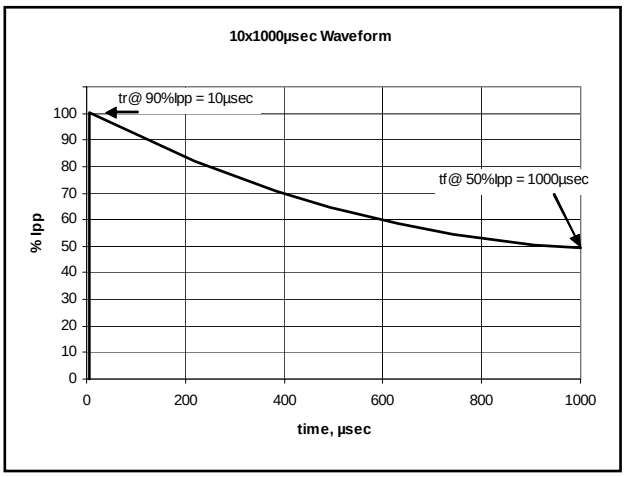






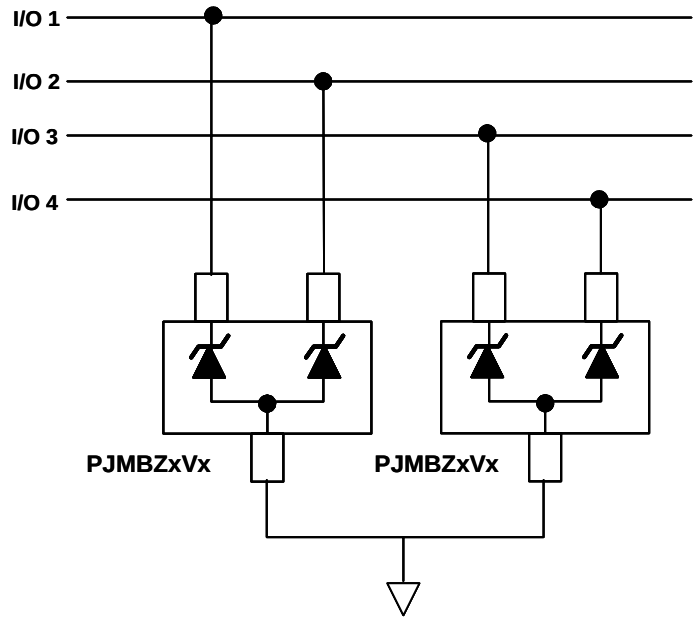




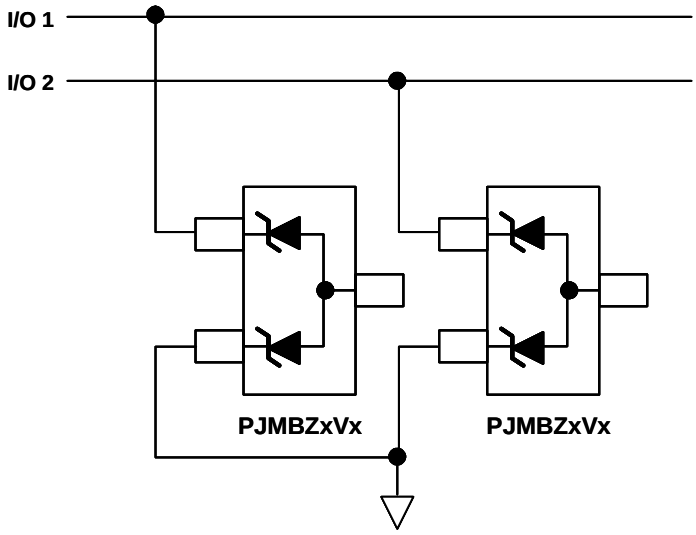


TYPICAL APPLICATION CONFIGURATIONS

4 Data Line Protection



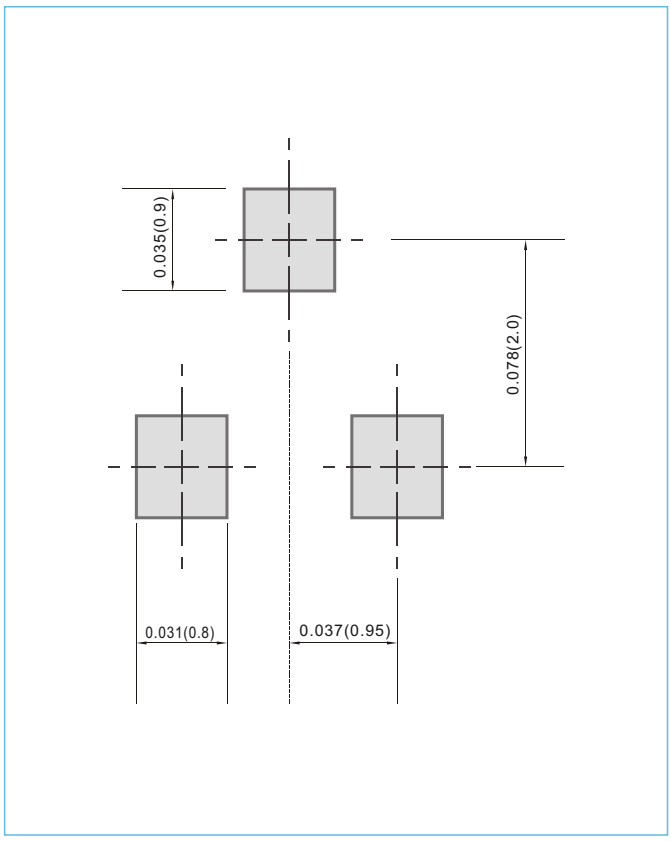
2 Data Line Protection (Bi-directional)



Capacitance in a bi-drectional configuration will be half of the value specified

MOUNTING PAD LAYOUT

SOT-23 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 12K per 13" plastic Reel

  T/R - 3.0K per 7" plastic Reel

LEGAL STATEMENT

IMPORTANT NOTICE

This information is intended to unambiguously characterize the product in order to facilitate the customer's evaluation of the device in the application. The information will help the customer's technical experts determine that the device is compatible and interchangeable with similar devices made by other vendors. The information in this data sheet is believed to be reliable and accurate. The specifications and information herein are subject to change without notice. New products and improvements in products and product characterization are constantly in process. Therefore, the factory should be consulted for the most recent information and for any special characteristics not described or specified.