

PJMBZ5V6 SERIES

DUAL TVS FOR ESD / TRANSIENT PROTECTION

VOLTAGE	5.6 to 6.8 Volts	POWER	150 Watts
----------------	-------------------------	--------------	------------------

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
- In compliance with EU RoHS 2002/95/EC directives

APPLICATIONS

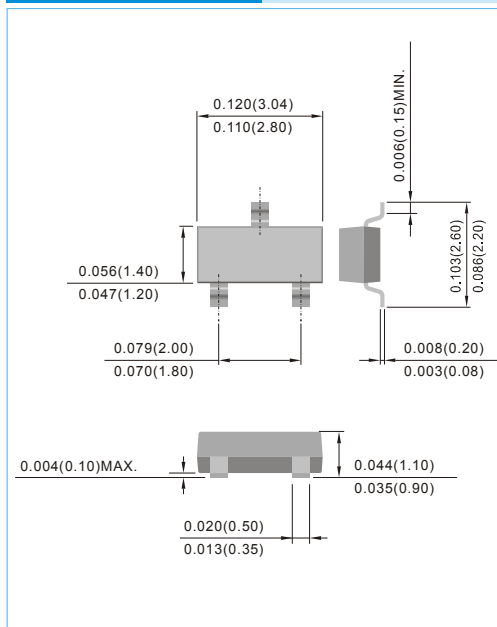
- Data Transmission Line Ports
- Computer Monitor Interface Port Protection
- Portable Consumer Electronics
- Instrumentation Equipment

MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apporx. Weight: 0.0003 ounces, 0.0084 grams

SOT-23

Unit : inch(mm)



MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	Symbol	Value	Units
Peak Pulse Power 8x20 usec Waveform	P _{PP}	150	W
Peak Pulse Power 10x1000 usec Waveform		30	
ESD per IEC61000-4-2 (Air)	V _{PP}	+/-15	kV
ESD per IEC61000-4-2 (Contact)		+/-8	kV
Lead Soldering Temperature (max 10 secs)	T _L	260	°C
Operating Junction Temperature and Storage Temperature Range	T _J ,T _{STG}	-55 to +150	°C

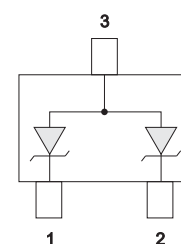


Fig.25



PJMBZ5V6 SERIES

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PJMBZ5V6 Marking UA						
PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Stand-Off Voltage	V _{RWM}		-	-	3.3	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1.0 mA I _{BR} =20 mA	5.13 5.32	5.4 5.6	5.67 5.88	V
Reverse Leakage Current	I _R	V _R =3.3V	-	-	5.0	μA
Clamping Voltage (8x20 usec)	V _{CL}	I _{PP} =20 Amps	-	-	9.0	V
Clamping Voltage (10x1000 usec)	V _{CL}	I _{PP} =5.0 Amps	-	-	7.0	V
Off State Junction Capacitance	C _J	0 Vdc Bias f=1MHz Between I/O pins and pin 3	-	-	90	pF

PJMBZ6V2 Marking UB						
PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Stand-Off Voltage	V _{RWM}		-	-	4.3	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1.0 mA I _{BR} =20 mA	5.89	6.2	6.51	V
Reverse Leakage Current	I _R	V _R =4.3V	-	-	0.5	μA
Clamping Voltage (8x20 usec)	V _{CL}	I _{PP} =20 Amps	-	-	9.5	V
Clamping Voltage (10x1000 usec)	V _{CL}	I _{PP} =4.0 Amps	-	-	7.5	V
Off State Junction Capacitance	C _J	0 Vdc Bias f=1MHz Between I/O pins and pin 3	-	-	70	pF

PJMBZ6V8 Marking UC						
PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Stand-Off Voltage	V _{RWM}		-	-	5.0	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1.0 mA I _{BR} =20 mA	6.46	6.8	7.14	V
Reverse Leakage Current	I _R	V _R =5.0V	-	-	0.5	μA
Clamping Voltage (8x20 usec)	V _{CL}	I _{PP} =20 Amps	-	-	10	V
Clamping Voltage (10x1000 usec)	V _{CL}	I _{PP} =4.0 Amps	-	-	8.5	V
Off State Junction Capacitance	C _J	0 Vdc Bias f=1MHz Between I/O pins and pin 3	-	-	100	pF

PJMBZ5V6 SERIES

RATING AND CHARACTERISTIC CURVES

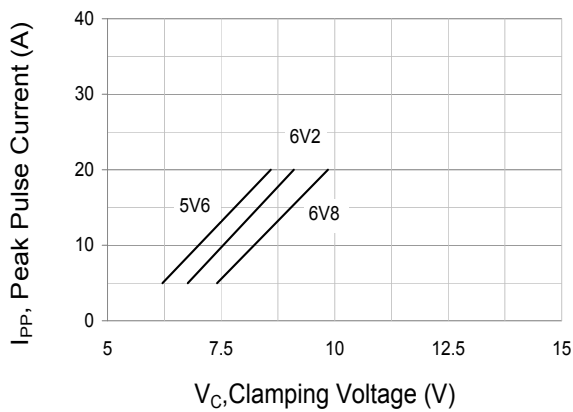


Fig.1 8/20 μ s Peak Pulse Current Waveform

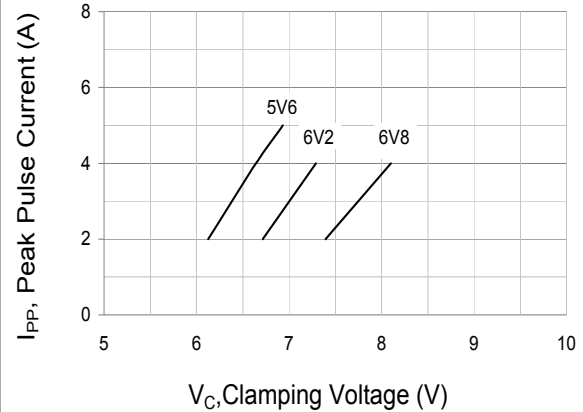


Fig.2 10/1000 μ s Peak Pulse Current Waveform

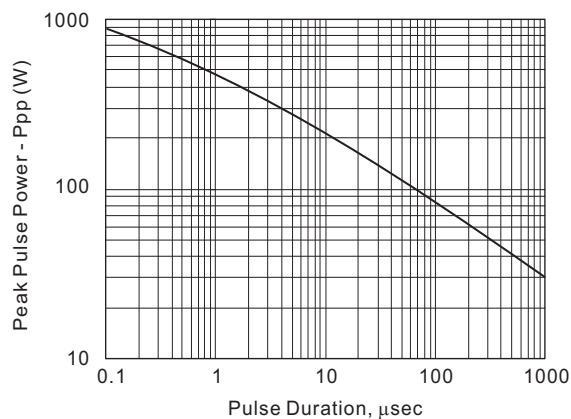


Fig.3 Non-Repetitive Peak Pulse Power vs Pulse Time

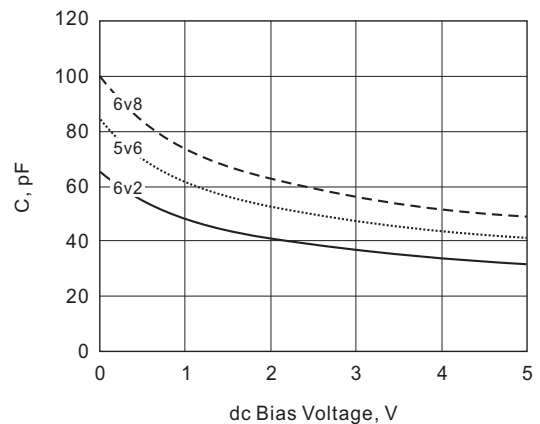


Fig.4 Capacitance vs. Biasing Voltage @1MHz

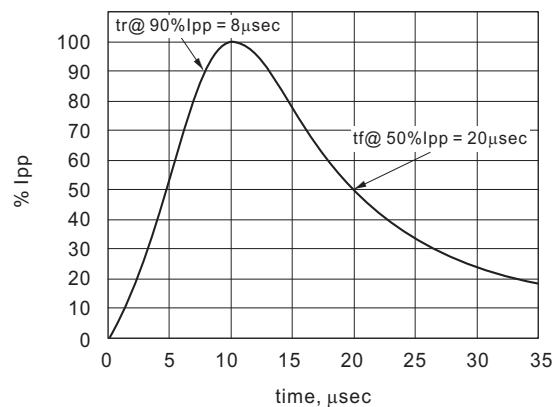


Fig.5 8x20 μ sec Surge Waveform

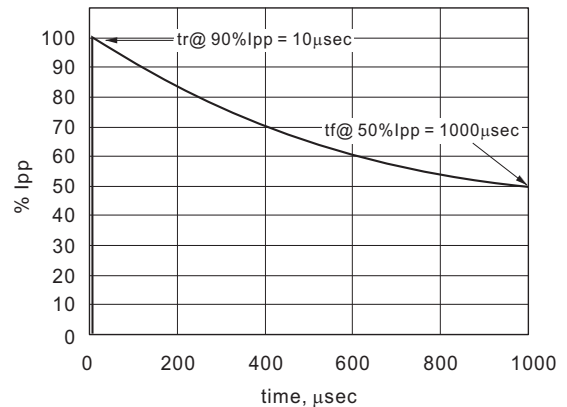
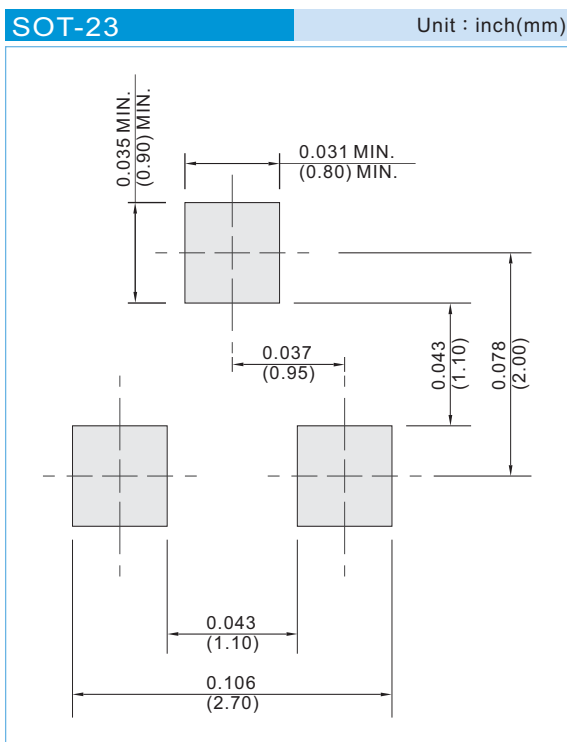


Fig.6 10x1000 μ sec Waveform

PJMBZ5V6 SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

Copyright PanJit International, Inc 2011

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.