

PJMBZ5V6 / PJMBZ6V2 / PJMBZ6V8

DUAL TVS ZENER 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

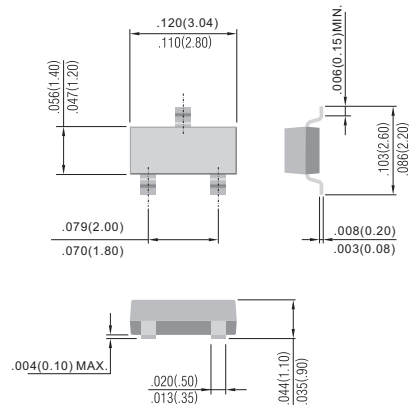
- Data Transmission Line Ports
- Computer Monitor Interface Port Protection
- Portable Consumer Electronics
- Instrumentation Equipment

MECHANICAL DATA

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

SOT-23

Unit: inch (mm)



MAXIMUM RATINGS

PARAMETER		Symbol	Value	Units
Peak Pulse Power	8x20 usec Waveform	P _{PP}	150	W
Peak Pulse Power	10x1000 usec Waveform		25	
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

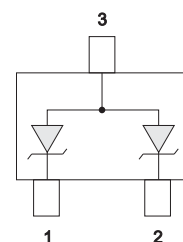


Fig.25

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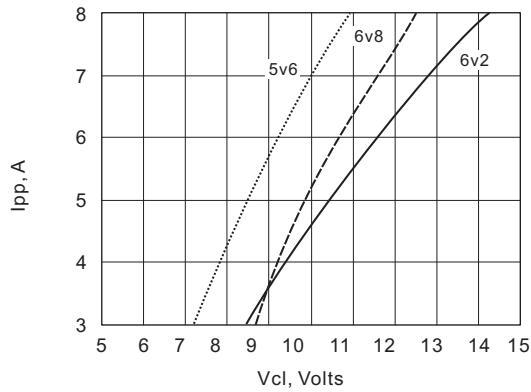
ELECTRICAL CHARACTERISTICS T_j = 25°C

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	5.32	5.4 5.6	5.88	V
Reverse Leakage Current	I _R	V _R =3.3V	-	-	5.0	μA
Clamping Voltage (8x20 usec)	V _{CL}	I _{PP} =5.0 Amps	-	-	9.0	V
Clamping Voltage (10x1000 usec)	V _{CL}	I _{PP} =2.0 Amps	-	-	7.0	V
Off State Junction Capacitance	C _J	0 Vdc Bias f=1MHz Between I/O pins and pin 3	-	-	90	pF

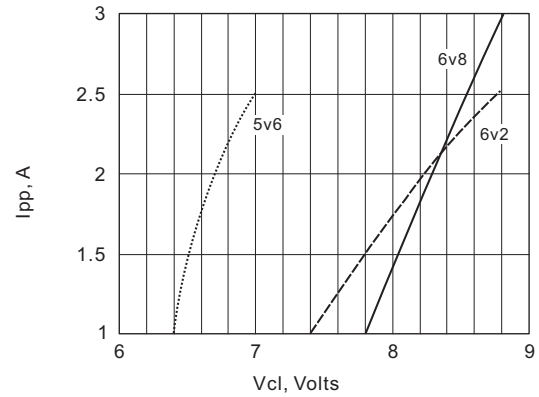
PJMBZ6V2 Marking UB						
PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Stand-Off Voltage	V _{RWM}		-	-	4.3	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1.0 mA I _{BR} =20 mA	5.89	6.2	6.51 6.60	V
Reverse Leakage Current	I _R	V _R =4.3V	-	-	0.5	μA
Clamping Voltage (8x20 usec)	V _{CL}	I _{PP} =5.0 Amps	-	-	11	V
Clamping Voltage (10x1000 usec)	V _{CL}	I _{PP} =2.0 Amps	-	-	8.5	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 7.30	V
Reverse Leakage Current	I _R	V _R =5.0V	-	-	0.5	μA
Clamping Voltage (8x20 usec)	V _{CL}	I _{PP} =5.0 Amps	-	-	10	V
Clamping Voltage (10x1000 usec)	V _{CL}	I _{PP} =2.0 Amps	-	-	9.0	V
Off State Junction Capacitance	C _J	0 Vdc Bias f=1MHz Between I/O pins and pin 3	-	-	100	pF

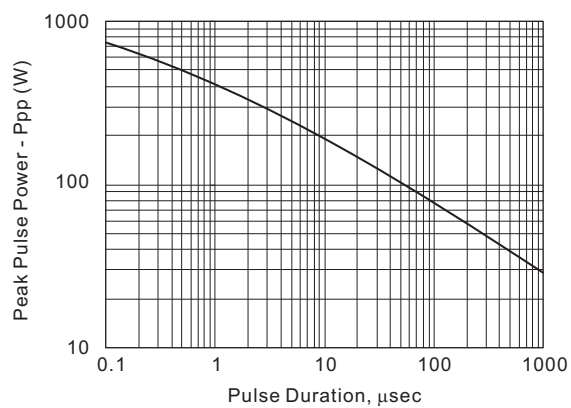
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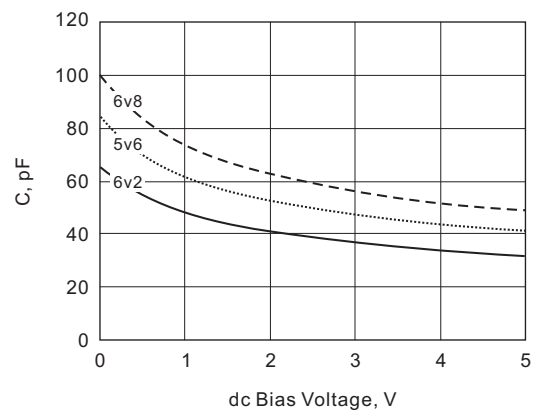
Clamping Voltage vs I_{pp} 8x20µsec Surge



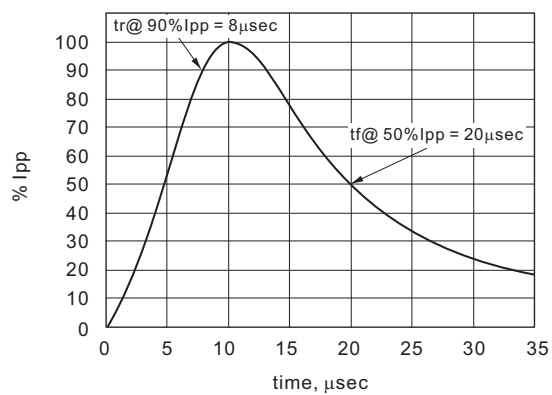
Clamping Voltage vs I_{pp} 10x1000µsec



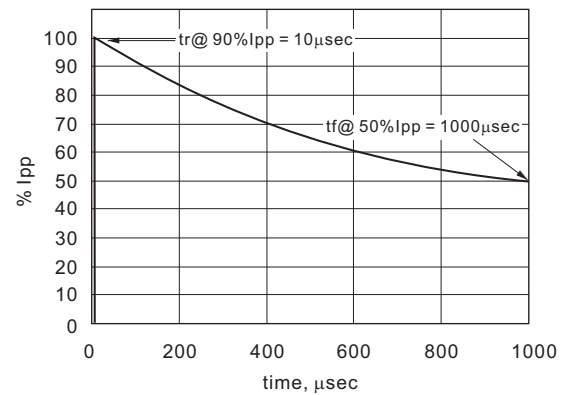
Non-Repetitive Peak Pulse Power vs Pulse Time



Capacitance vs. Biasing Voltage @1MHz



8x20µsec Surge Waveform



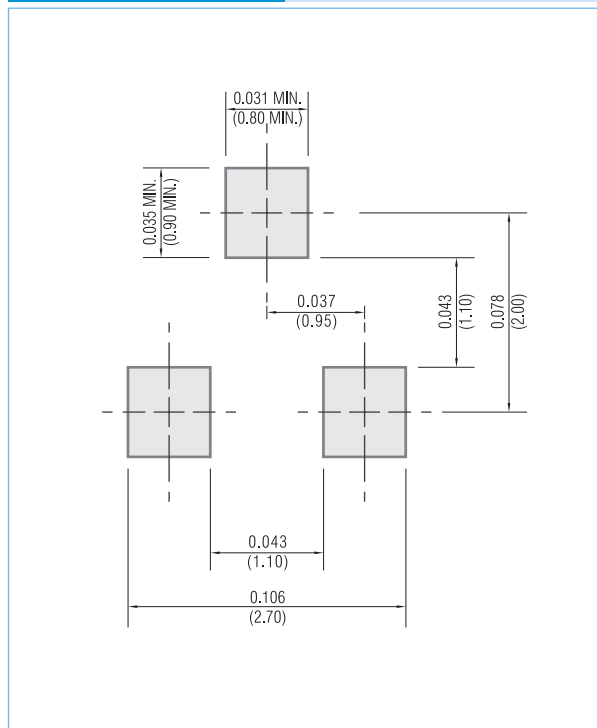
10x1000µsec Waveform

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MOUNTING PAD LAYOUT

SOT-23

Unit: inch (mm)



ORDER INFORMATION

- Packing information

T/R - 12K per 13" plastic Reel

T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

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