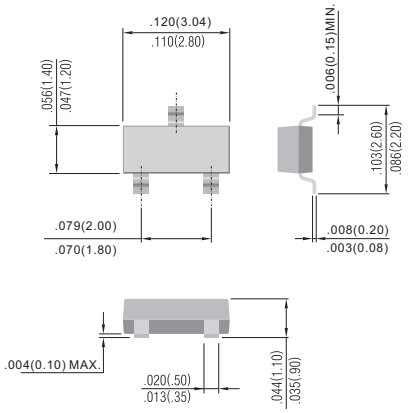
PJMBZ5V6 / PJMBZ6V2 / PJMBZ6V8

DUAL TVS ZENER FOR ESD / TRANSIENT PROTECTION

VOLTAGE 5.6 to 6.8 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
- 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

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

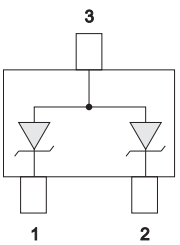


Fig.25

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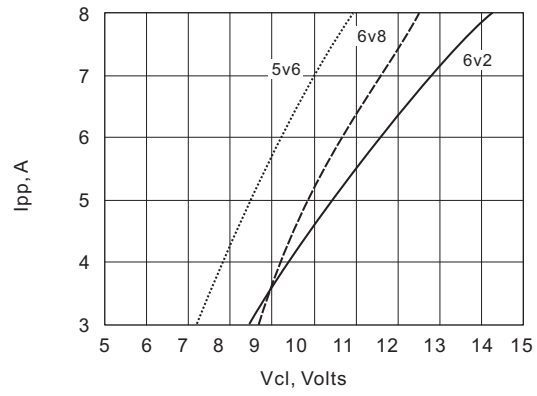
ELECTRICAL CHARACTERISTICS Tj = 25°C

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

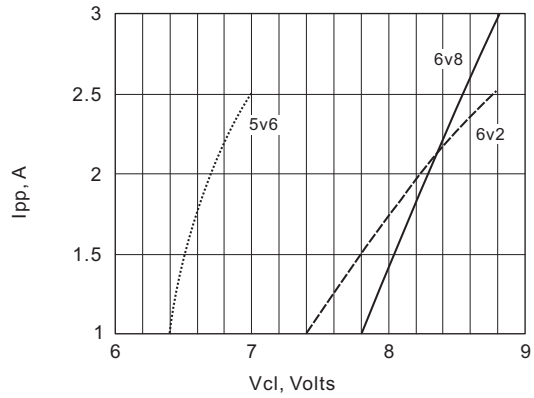
PJMBZ6V2 Marking UB						
PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Stand-Off Voltage	V_{RWM}		-	-	4.3	V
Reverse Breakdown Voltage	V_{BR}	I_{BR}=1.0 mA I_{BR}=20 mA	5.89	6.2	6.51 6.60	V
Reverse Leakage Current	I_R	V_R=4.3V	-	-	0.5	µA
Clamping Voltage (8x20 usec)	V_{CL}	I_{PP}=5.0 Amps	-	-	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

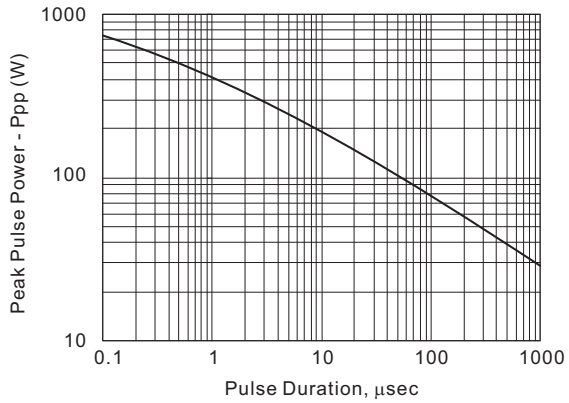
PJMBZ5V6 / PJMBZ6V2 / PJMBZ6V8



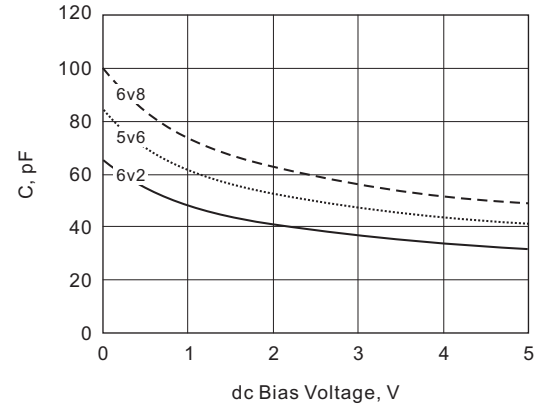
Clamping Voltage vs Ipp 8x20μsec Surge



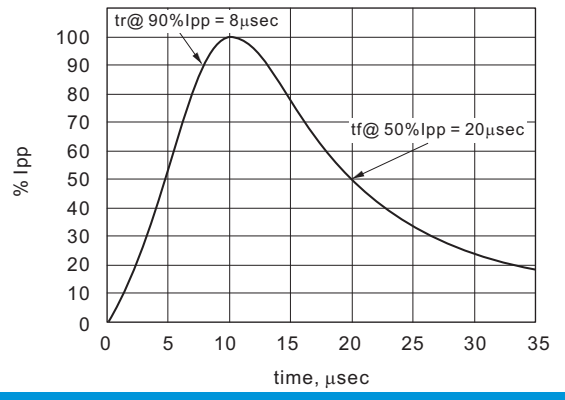
Clamping Voltage vs 10x1000μsec



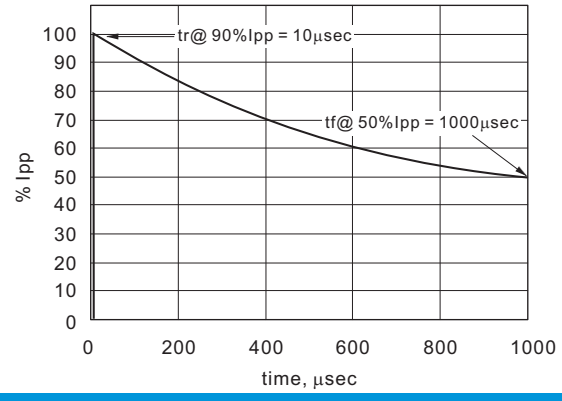
Non-Repetitive Peak Pulse Power vs Pulse Time



Capacitance vs. Biasing Voltage @1MHz



8x20μsec Surge Waveform

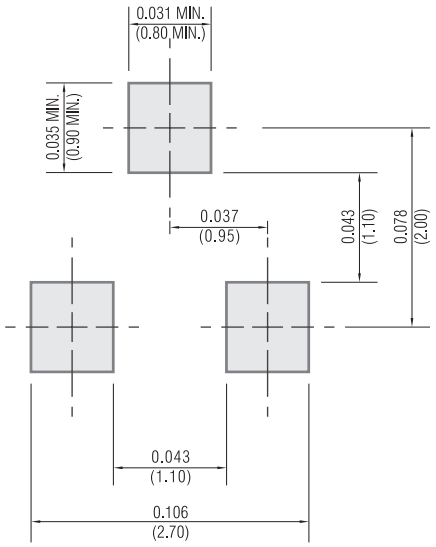


10x1000μsec Waveform

PJMBZ5V6 / PJMBZ6V2 / PJMBZ6V8

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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