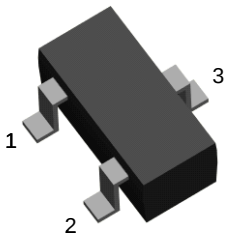
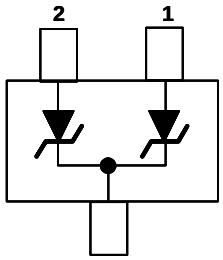
PRELIMINARY

DUAL TVS ZENER FOR ESD / TRANSIENT PROTECTION

This Dual Zener ESD/Transient Protector with a Common Cathode Configuration has been designed to protect Sensitive Equipment against ESD and prevent Latch-Up events. The combination of a dual device protects up to two data lines in a single package giving the advantage of board space savings where this is a premium.





SOT23

SPECIFICATION FEATURES

- **Working Peak Reverse Voltage of 15V and 22V**
- **Maximum Leakage Current of 100nA and 50nA @ VWRM**
- **IEC61000-4-2 Compliance 15kV Air, 8kV Contact Discharge**
- **Industry Standard SOT23 Package**

APPLICATIONS

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

MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power 8x20µsec Waveform	P_{pp}	150	W
Peak Pulse Power 10x1000µsec Waveform		25	W
ESD Voltage (HBM)	V_{ESD}	>25	kV
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C
Lead Soldering Temperature (max 10 secs)	T_L	260	°C

ELECTRICAL CHARACTERISTICS Tj = 25°C

PJMBZ15VD

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				12	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1mA	14.25		15.75	V
Reverse Leakage Current	I_R	V_R = 15V			100	nA
Clamping Voltage (8x20µsec)	V_{cl}	I_{pp} = 6 Amps			24	V
Clamping Voltage (10x1000µsec)	V_{cl}	I_{pp} = 1 Amps			23	V
Maximum Peak Pulse Current	I_{pp}	8x20 µsec Waveform			7	A
Off State Junction Capacitance	Cj	0 Vdc Bias f = 1MHz Between I/O pins and pin 3			80	pF

PRELIMINARY

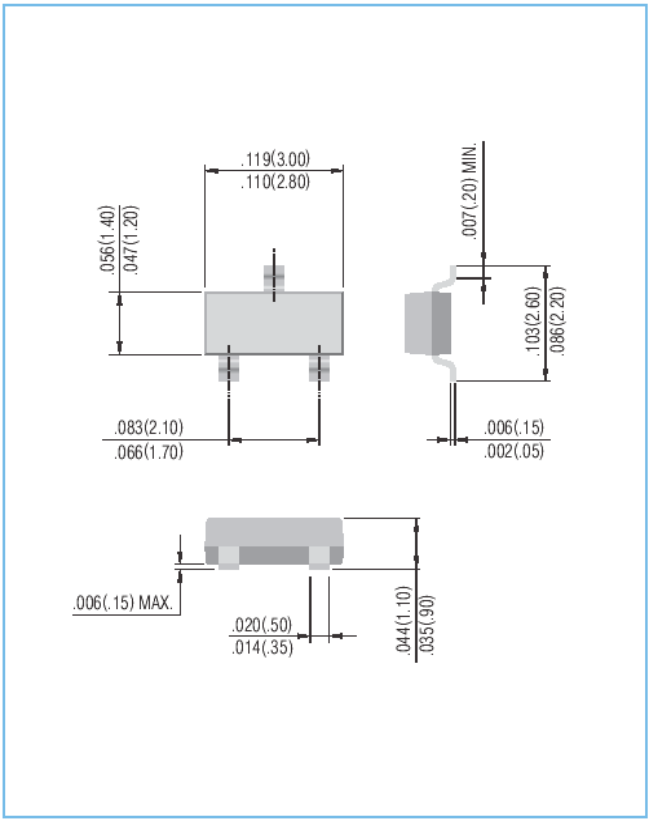
ELECTRICAL CHARACTERISTICS Tj = 25°C

PJMBZ27VC

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				22	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1 mA	25.65		28.35	V
Reverse Leakage Current	I_R	V_R = 22V			50	nA
Clamping Voltage (8x20µsec)	V_{cl}	I_{pp} = 4 Amps			36	V
Clamping Voltage (10x1000µsec)	V_{cl}	I_{pp} = 0.85			30	V
Maximum Peak Pulse Current	I_{pp}	8x20 µsec Waveform			5	A
Off State Junction Capacitance	Cj	0 Vdc Bias f = 1MHz Between I/O pins and pin 3			50	pF

PACKAGE LAYOUT AND PAD DIMENSIONS

SOT-23 Unit: inch (mm)



SOT-23 Unit: inch (mm)