



SINGLE AND DUAL LOW CAPACITANCE ESD / TRANSIENT PROTECTOR FOR 1.5 V SYSTEMS

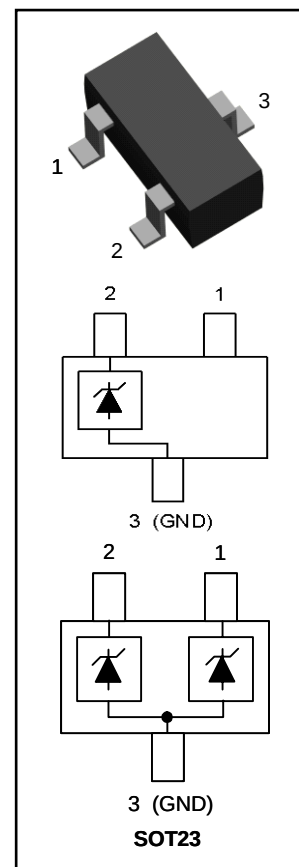
This patented Single and Dual Zener like ESD/Transient Protector has been designed to protect Sensitive Equipment against ESD and prevent Latch-Up events, offering a minimum insertion loss in High speed Data Lines in Communications ports used in Portable Consumer, Computing and Networking Applications operating at 1.5V and below.

SPECIFICATION FEATURES

- Maximum Capacitance of 10pF @ 0Vdc, 1 MHz
- Maximum Leakage Current of 2μA @ 1.5V
- Breakdown Voltage of 1.9V @ 1mA
- IEC61000-4-2 Compliance 15kV Air, 8kV Contact Discharge
- Industry Standard SOT23 Package

APPLICATIONS

- High Speed Data Transmission Lines
- Microcontroller and Microprocessor I/O Interfaces
- Portable Consumer Electronics
- Instrumentation Equipment
- LAN/WAN Equipment



MAXIMUM RATINGS

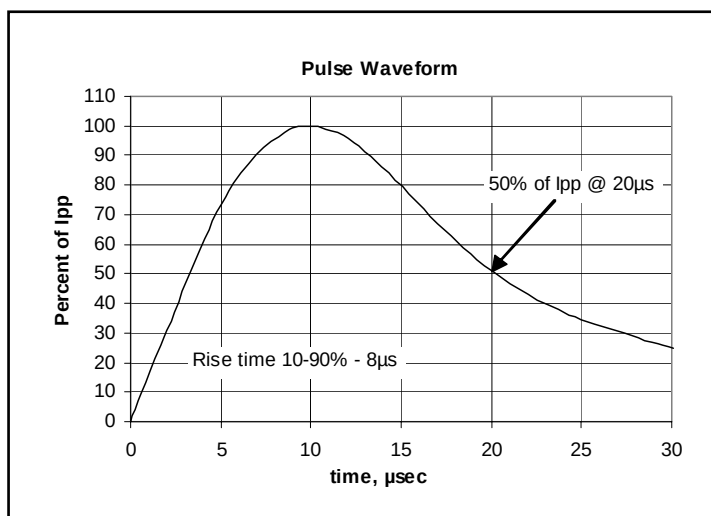
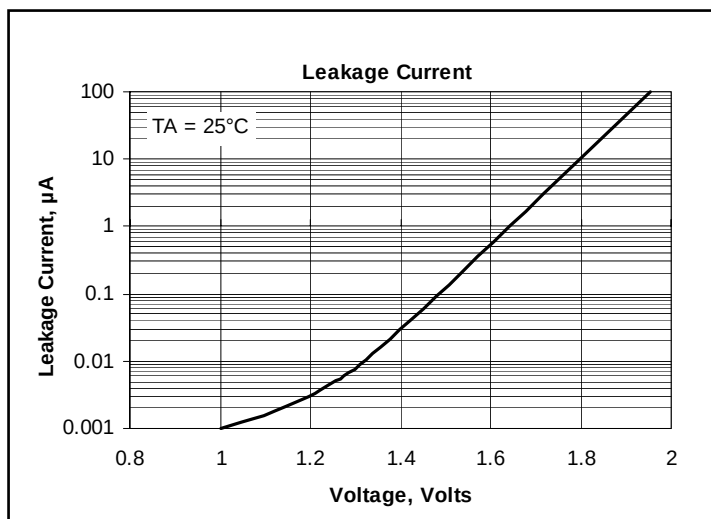
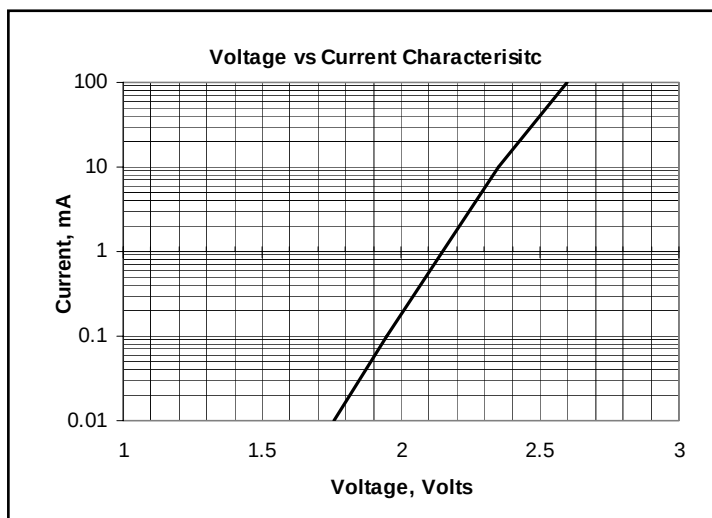
Rating	Symbol	Value	Units
Peak Pulse Power (8/20μs Waveform)	P_{pp}	50	W
ESD Voltage (HBM)	V_{ESD}	>25	kV
Operating Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C
Lead Soldering Temperature (max 10 s)	T_L	260	°C

ELECTRICAL CHARACTERISTICS $T_J = 25^{\circ}\text{C}$

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				1.5	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR} = 100\mu\text{A}$	1.75	1.8		V
		$I_{BR} = 1\text{mA}$	1.9	2.2		V
Reverse Leakage Current	I_R	$V_R = 1.5\text{V}$			2.0	μA
Clamping Voltage (8/20μs)	V_C	$I_{pp} = 1\text{A}$			4	V
Clamping Voltage (8/20μs)	V_C	$I_{pp} = 3\text{A}$			7	V
Maximum Peak Pulse Current	I_{pp}	8/20 μs Waveform			5	A
Off State Junction Capacitance	C_j	0 Vdc Bias f = 1MHz Between I/O pins and pin 3		6	10	pF

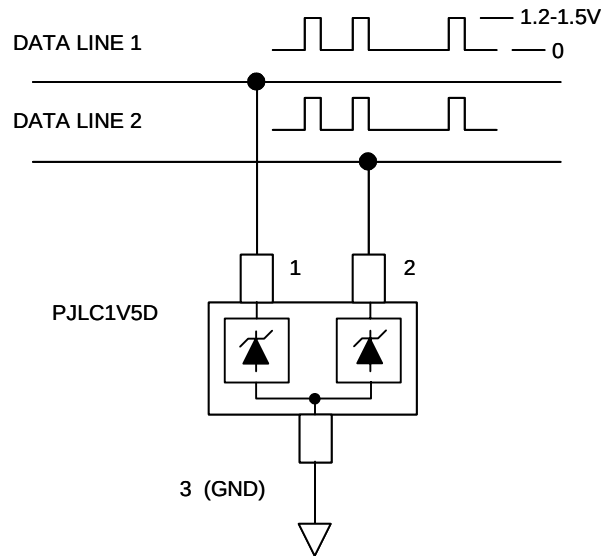


TYPICAL CHARACTERISTICS $T_j = 25^\circ\text{C}$

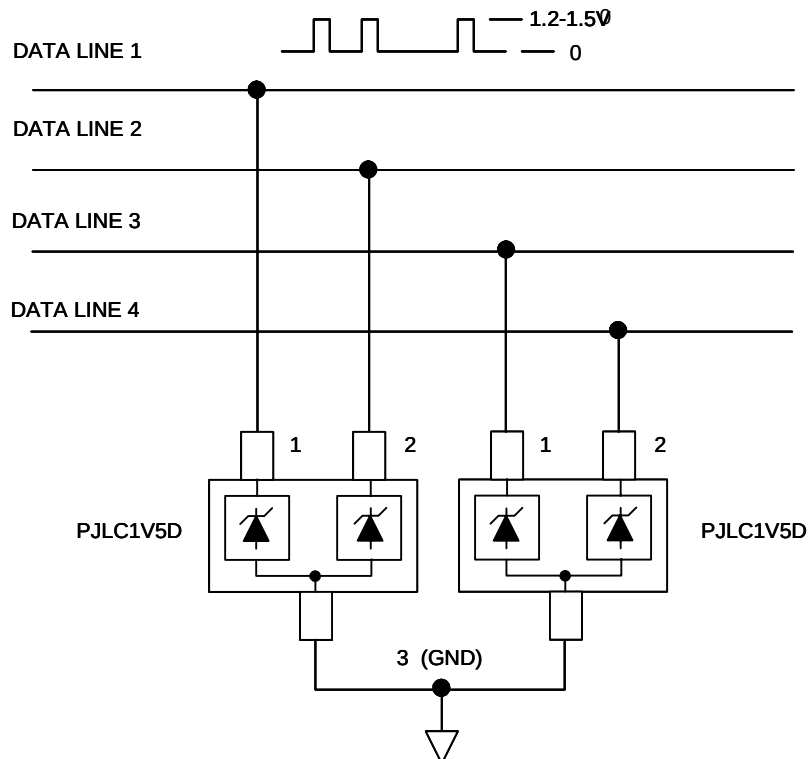


TYPICAL APPLICATION INFORMATION

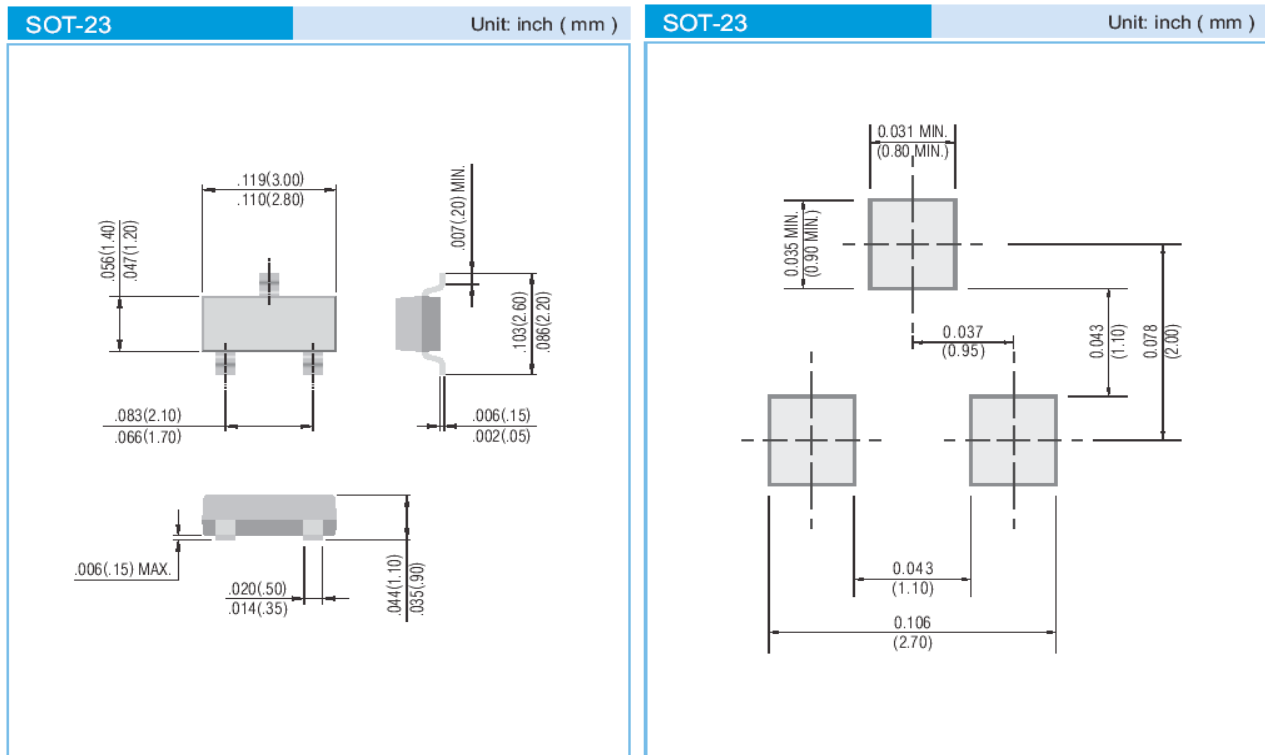
ESD Protection for two Data Lines



ESD Protection for Four Data Lines



PACKAGE AND PAD LAYOUT DIMENSIONS



Device	Marking Code
PJLC1V5	T1L
PJLC1V5D	T2L

© Copyright PanJit International, Inc 2006

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.