



# PJSLC05C-02

## LOW CAPACITANCE SINGLE TVS 200W FOR HIGH SPEED DATA LINES

This Transient Voltage Suppressor is intended to Protect Sensitive Equipment against Electrostatic Discharge and Transient Events as well to offer a Minimum insertion loss in high speed data communication transmission line ports used in Portable Consumer, Computing and Networking Applications.

### SPECIFICATION FEATURES

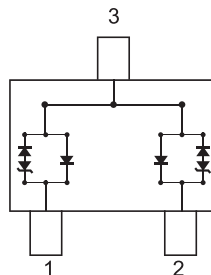
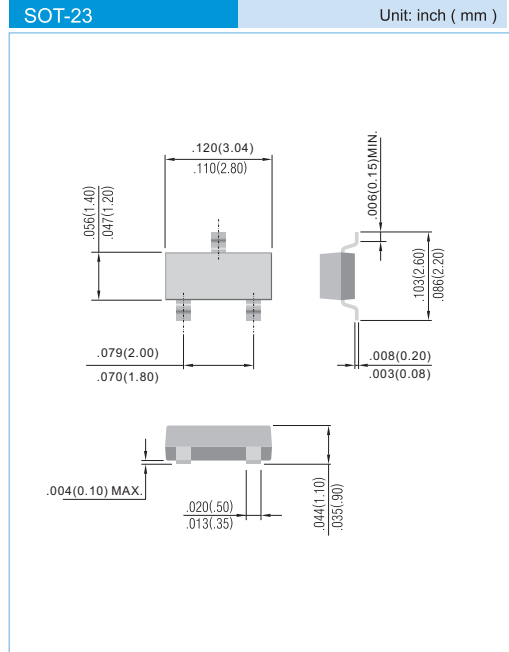
- Working Peak Reverse Voltage Range-5V
- Max Power Dissipation of 200W 8/20 $\mu$ s
- Maximum Leakage Current of 1 $\mu$ A
- IEC61000-4-2 Compliance 15kV Air, 8kV Contact Discharge
- Max capacitance of 3pF at 0V dc
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: SOT-23, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apprx. Weight: 0.0003 ounce, 0.0084 gram
- Marking: LC5

### APPLICATIONS

- Mobile Phones and accessories
- Universal Serial Bus (USB1.1 and 2.0) Applications
- Portable Consumer Electronics
- Instrumentation Equipment
- Video I/O Ports



### MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power 8/20 $\mu$ s Waveform	PPP	200	W
ESD Voltage (HBM)	V <sub>ESD</sub>	>25	kV
Operating Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Thermal Resistance	T <sub>STG</sub>	-55 to +150	°C
Lead Soldering Temperature (max 10 secs)	T <sub>L</sub>	260	°C

PAN JIT RESERVES THE RIGHT TO CHANGE THE SPECIFICATION ANY TIME WITHOUT NOTICE IN ORDER TO IMPROVE THE DESIGN AND SUPPLY THE BEST POSSIBLE PRODUCT.



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

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Parameter	Symbol	Condition	Min	Typ	Max	Units
Reverse Stand-Off Voltage	$V_{WRM}$		-	-	5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1\text{mA}$	6	-	-	V
Reverse Leakage Current	$I_R$	$V_R=5\text{V}$	-	-	1	$\mu\text{A}$
Clamping Voltage (8x20 $\mu\text{sec}$ )	$V_C$	$I_{PP}=5\text{A}$	-	-	11.5	V
Clamping Voltage <sub>ee</sub> (8x20 $\mu\text{sec}$ )	$V_C$	$I_{PP}=10\text{A}$	-	-	14.5	V
Maxmum Peak Pulse Current	$I_{PP}$	8/20 $\mu\text{s}$ Waveform	-	-	15	A
Off State Junction Capacitance	$C_J$	0 Vdc Bias $f=1\text{MHz}$ Between pins 1.3 or 2.3	-	2.4	3	$\text{pF}$

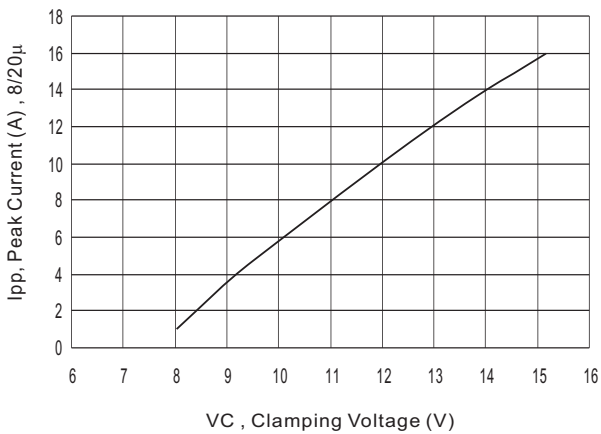


Fig 1- Clamping Voltage vs Peak Current

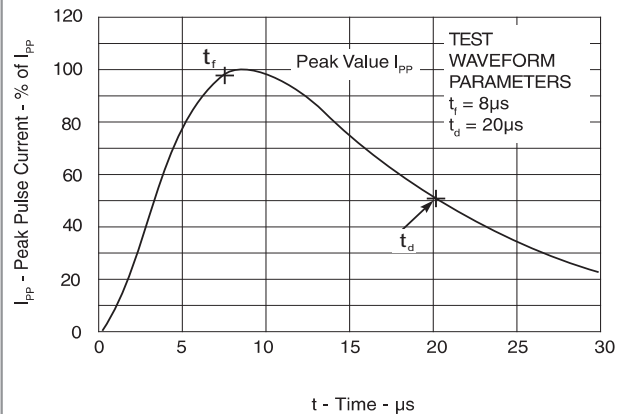


Fig 2- Pulse Waveform

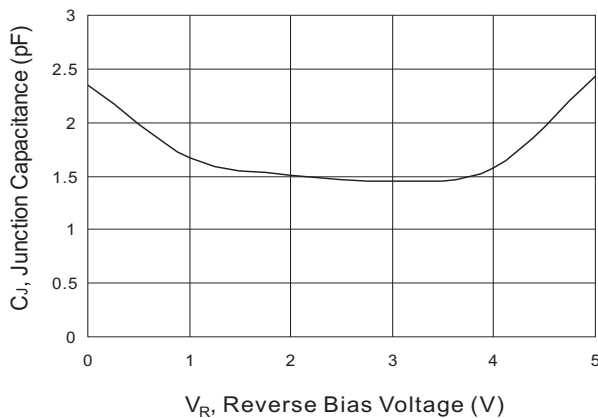


Fig 3- Typical Junction Capacitance under Bias

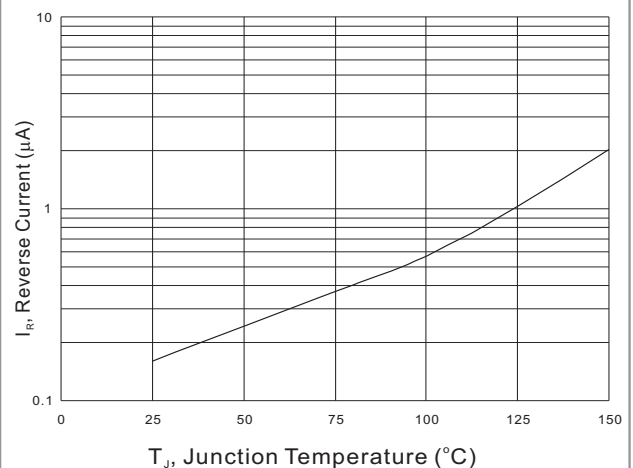
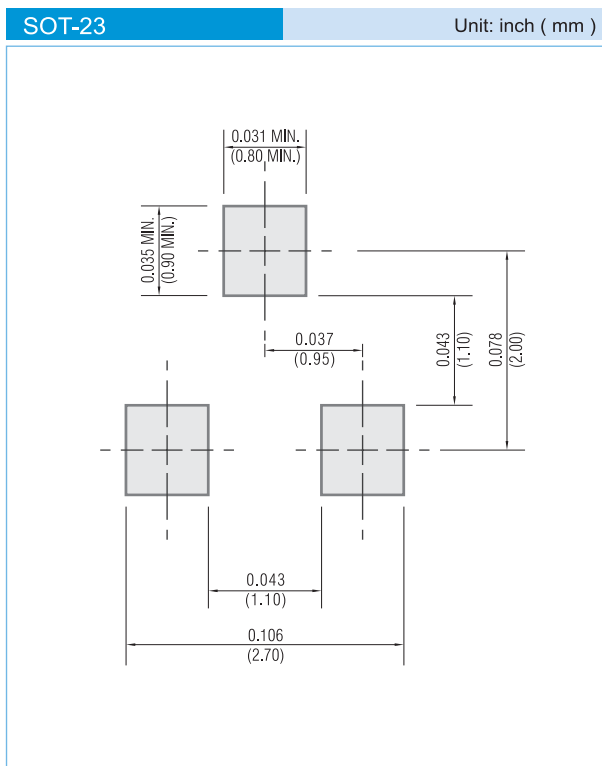


Fig 4- Typical Leakage vs Junction Temperature



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## LEGAL STATEMENT

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