



# PJSD03LCTM

## BI-DIRECTIONAL ESD PROTECTION DIODE

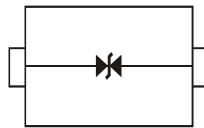
This bi-directional TVS has been designed to protect sensitive equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating at 3.3Vdc and below. This offers an integrated solution to protect a single data line where the board space is a premium.

### SPECIFICATION FEATURES

- 50W Power Dissipation (8/20µs Waveform)
- Low Leakage Current, Maximum of 2.5µA@3.3Vdc
- Very low Clamping voltage
- IEC 61000-4-2 ESD ± 15kV air, ± 8kV Contact Compliance
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00002 ounces, 0.0005grams
- Case : SOD-923, Plastic
- Marking : O

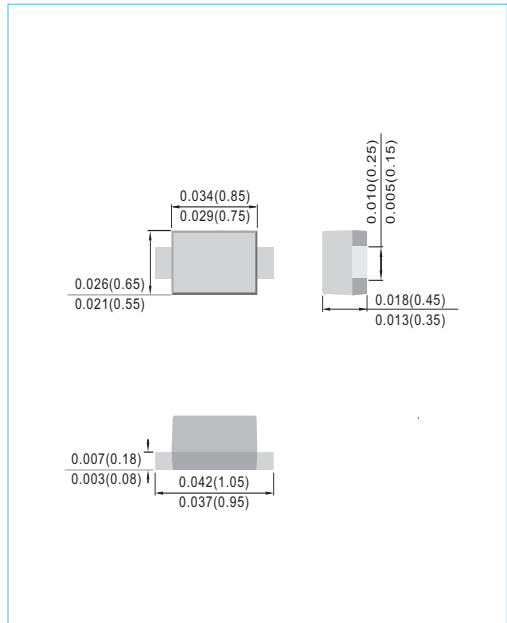
### APPLICATIONS

- Video I/O ports protection
- Set Top Boxes
- Portable Instrumentation



### SOD-923

Unit : inch(mm)



### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power (8/20 µs Waveform)	P <sub>PP</sub>	50	W
Peak Pulse Current (8/20 µs Waveform)	I <sub>PPM</sub>	3	A
IEC61000-4-2 Contact	V <sub>ESD</sub>	±8	kV
IEC61000-4-2 Air	V <sub>ESD</sub>	±15	kV
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	V <sub>RWM</sub>		-	-	3.3	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> =1mA	5.4	-	7.0	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =3.3V	-	-	2.5	µA
Clamping Voltage (8/20ms)	V <sub>C</sub>	I <sub>PP</sub> =3A	-	14	16.6	V
Off State Junction Capacitance	C <sub>J</sub>	0 Vdc Bias f=1MHz	-	13	-	pF



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## CHARACTERISTIC CURVES

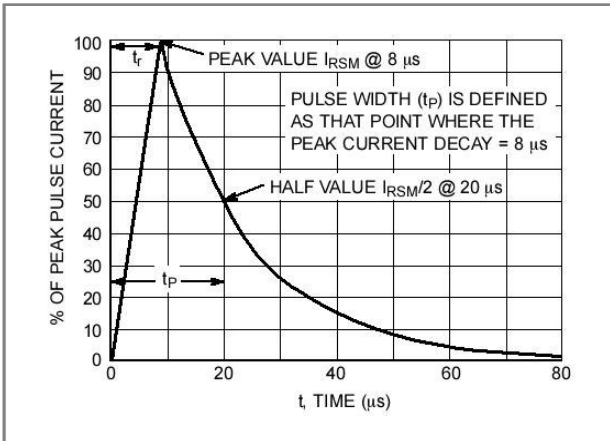


Fig.1 8X20us Pulse Waveform

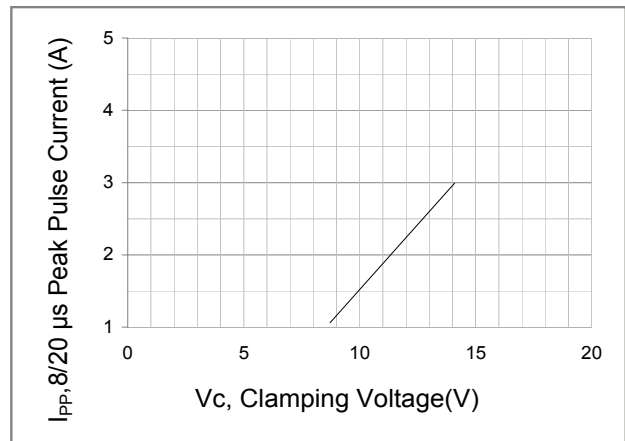


Fig.2 Typical Peak Clamping Voltage

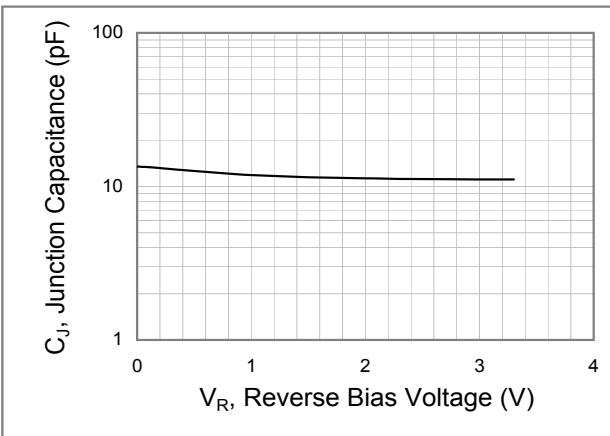


Fig.3 Typical Junction Capacitance

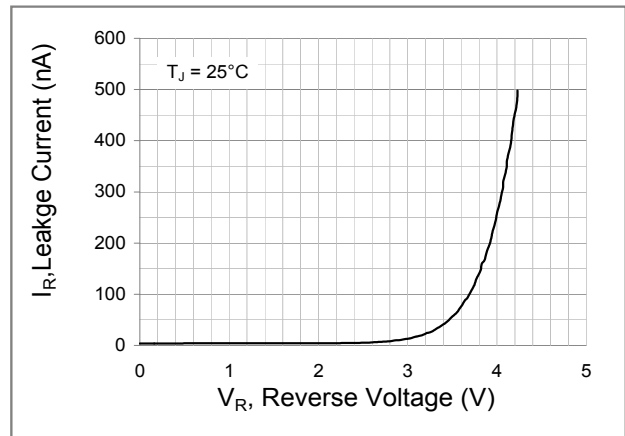
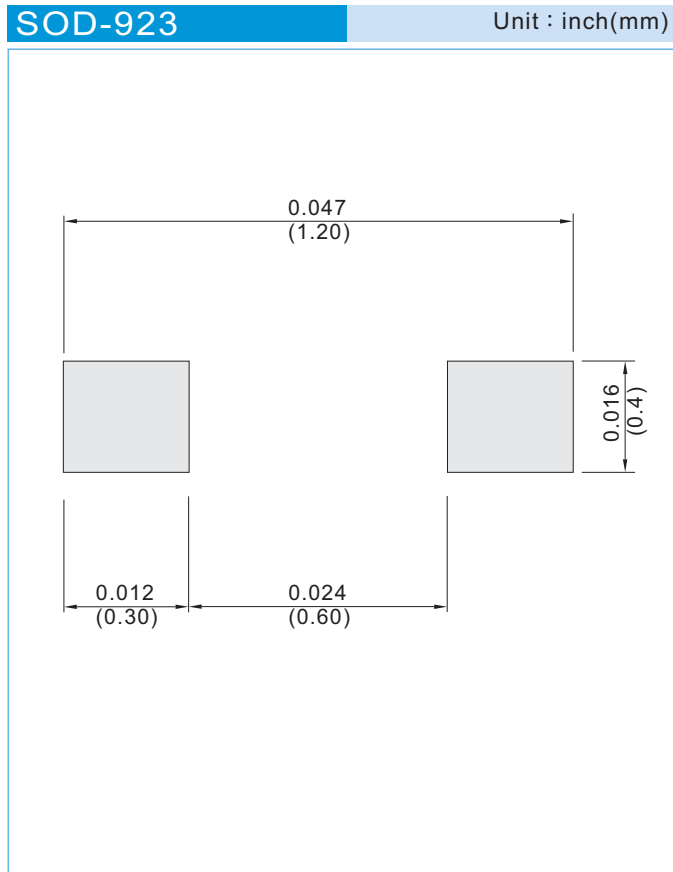


Fig.4 Typical Reverse Characteristics



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information  
T/R - 8K per 7" plastic Reel

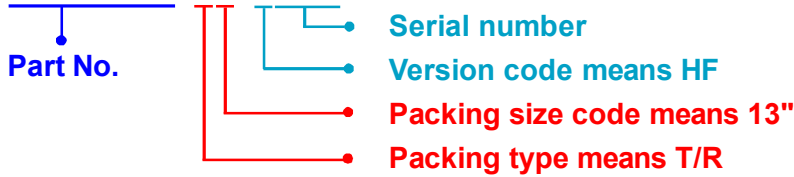


# PJSD03LCTM

Part No\_packing code\_Version  
PJSD03LCTM\_R1\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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