



# PJSD05LCTM-AU

## BI-DIRECTIONAL ESD PROTECTION DIODE

This Penta has been designed to Protect Sensitive Equipment against ESD and to prevent Latch-Up events in CMOS circuitry operating at 5Vdc and below. This offers an integrated solution to protect up to data line where the board space is a premium.

### SPECIFICATION FEATURES

- 25W Power Dissipation (8/20µs Waveform)
- Low Leakage Current, Maximum of 1µA@5Vdc
- Very low Clamping voltage
- IEC 61000-4-2 ESD 15kV air, 8kV Contact Compliance
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)
- Acquire quality system certificate : TS16949
- AEC-Q101 qualified

### APPLICATIONS

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

### MECHANICAL DATA

- Case : SOD-923, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0004gram
- Marking : X

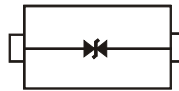
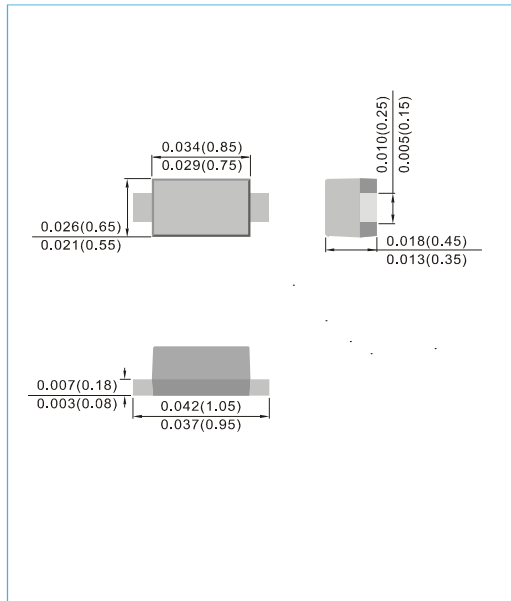


Fig.138(TOP VIEW)

### SOD-923

Unit : inch(mm)



### MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 µs Waveform)	P <sub>PP</sub>	25	W
Peak Pulse Current (8/20 µs Waveform)	I <sub>PP</sub>	2	A
ESD Voltage (HBM)	V <sub>ESD</sub>	>25	kV
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150	°C

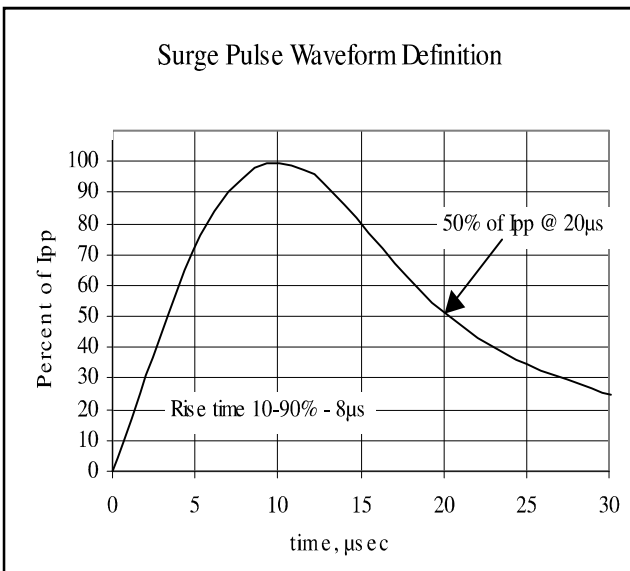
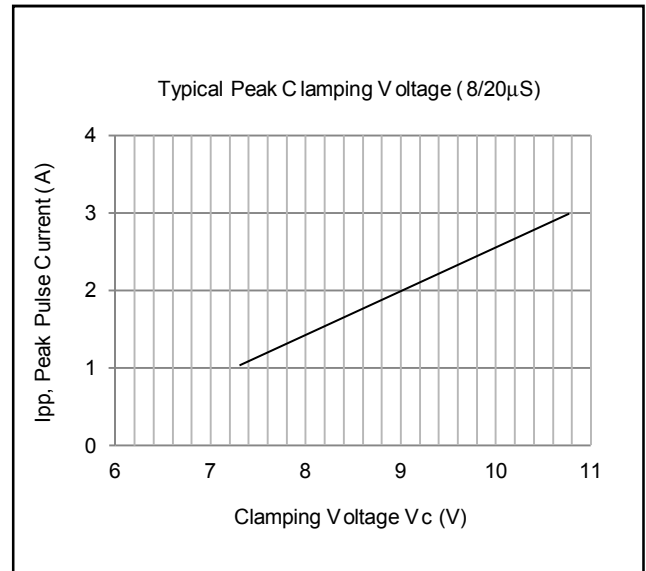
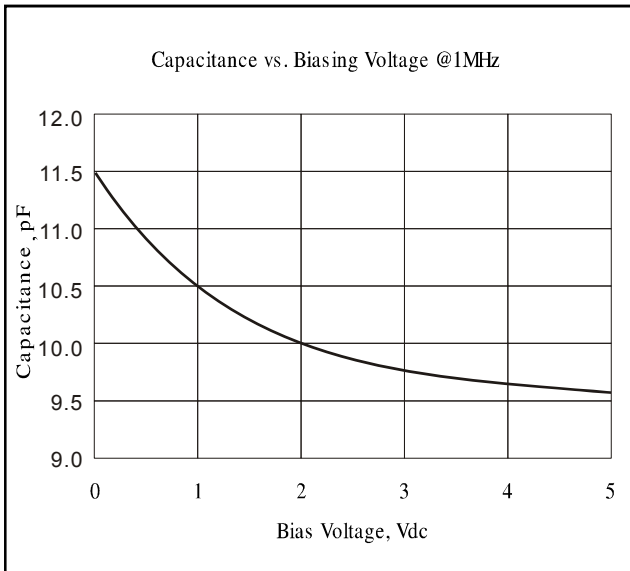
### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V <sub>WRM</sub>		-	-	5.0	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> =1mA	5.78	-	7.82	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	1.0	µA
Clamping Voltage (8/20µs)	V <sub>C</sub>	I <sub>PP</sub> =2A	-	-	12.5	V
Off State Junction Capacitance	C <sub>J</sub>	0 Vdc Bias f=1MHz	-	-	15	pF



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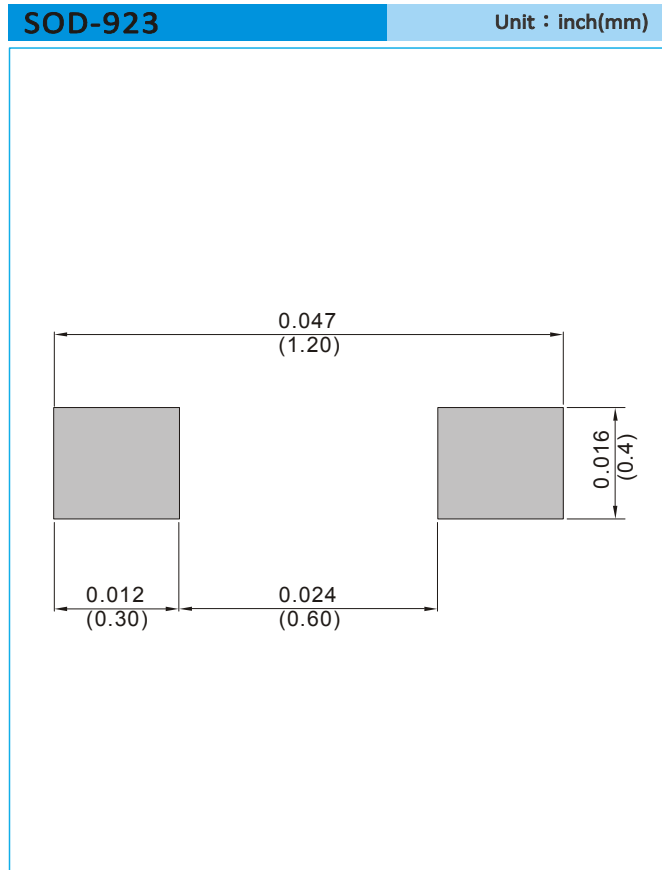
## TYPICAL CHARACTERISTICS





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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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



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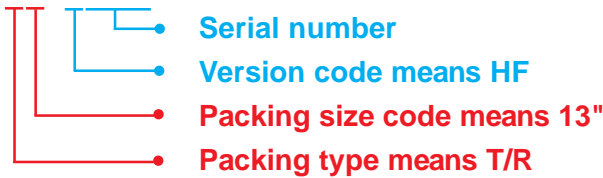
**Part No\_packing code\_Version**

PJSD05LCTM-AU\_R1\_000A1

**For example :**

**RB500V-40\_R2\_00001**

Part No.



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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