



# PJSD05CTM

## 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

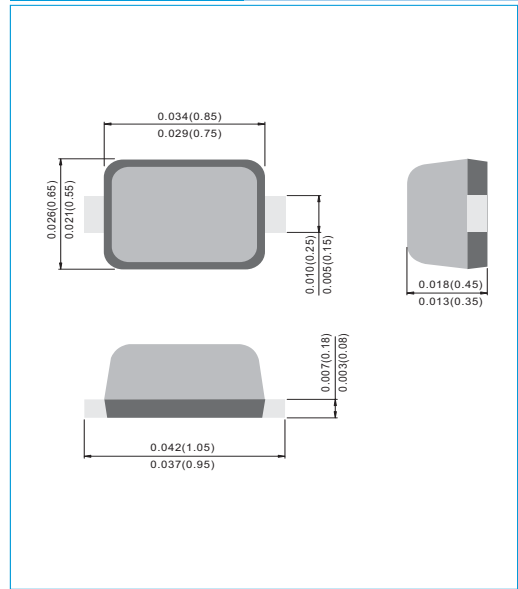
- 100W Power Dissipation (8/20 $\mu$ s Waveform)
- Low Leakage Current, Maximum of 1 $\mu$ A@5Vdc
- Very low Clamping voltage
- IEC 61000-4-2 ESD 15kV air, 8kV Contact Compliance
- In compliance with EU RoHS 2002/95/EC directivess

### APPLICATIONS

- Video I/O ports protection
- Set Top Boxes
- Portable Instrumentation
- Case : SOD-923, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0004gram
- Marking : H

SOD-923

Unit: inch ( mm )



### MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 $\mu$ s Waveform)	P <sub>PP</sub>	100	W
Maximum Peak Pulse Current (8/20 $\mu$ s Waveform)	I <sub>PP</sub>	5.0	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 125	°C

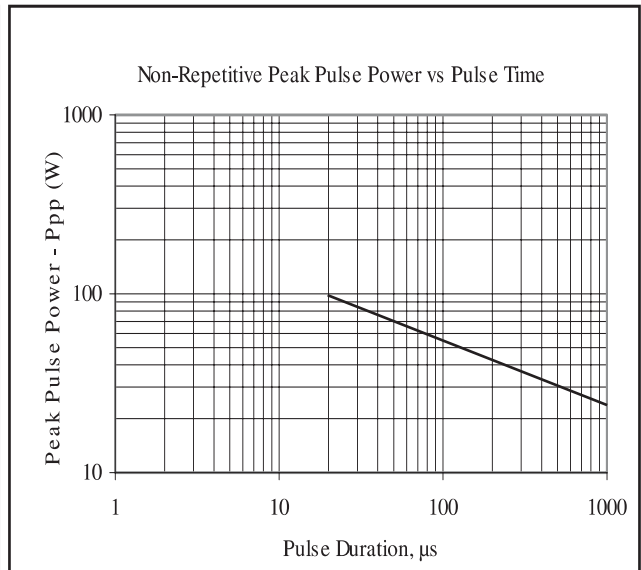
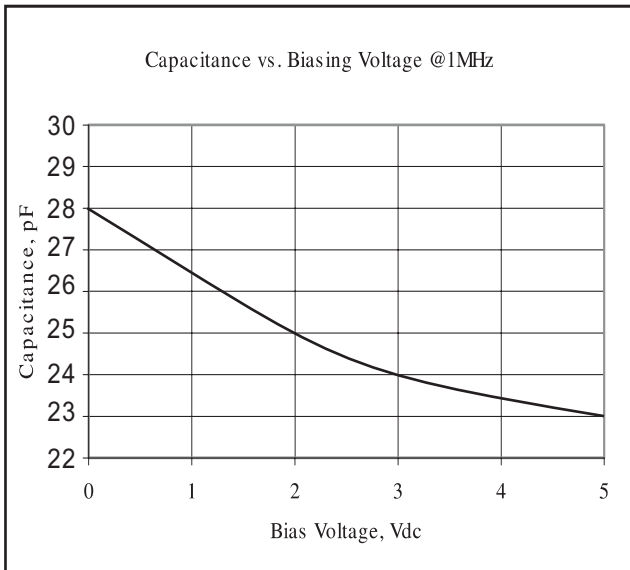
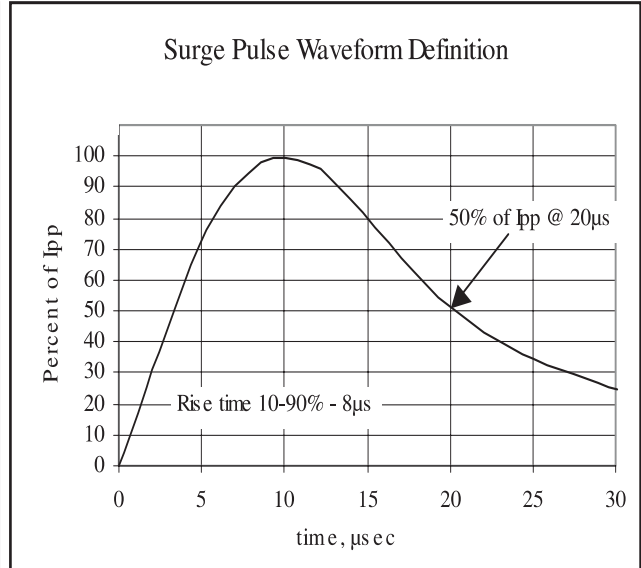
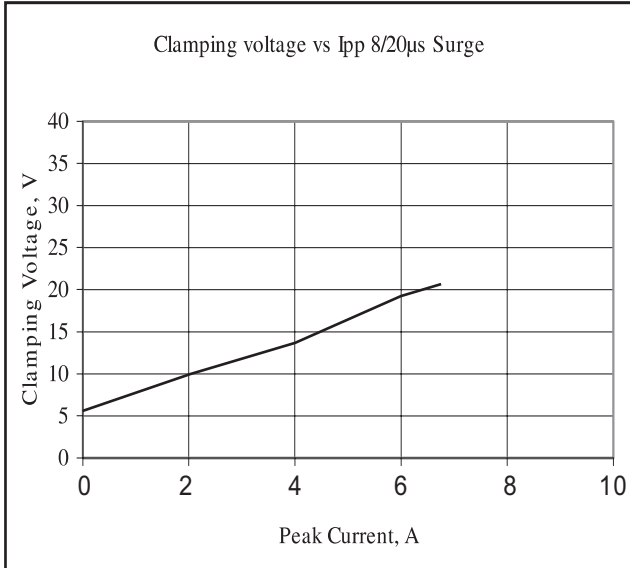
### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

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	$\mu$ A
Clamping Voltage (8/20 $\mu$ s)	V <sub>C</sub>	I <sub>PP</sub> =1A	-	-	12.5	V
Off State Junction Capacitance	C <sub>J</sub>	0 Vdc Bias f=1MHz	-	-	30	pF



# PJSD05CTM

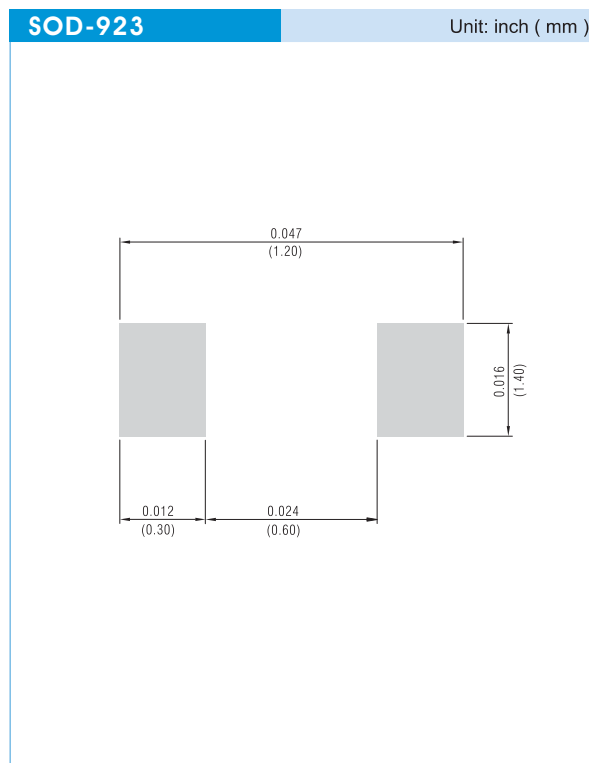
## TYPICAL CHARACTERISTICS





# PJSD05CTM

## MOUNTING PAD LAYOUT



## ORDER INFORMATION

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

## LEGAL STATEMENT

### Copyright PanJit International, Inc 2009

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.