



# 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

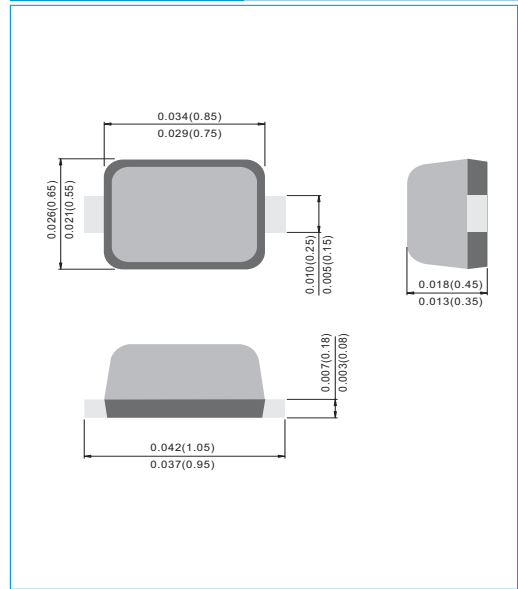
- 100W Power Dissipation (8/20µs Waveform)
- Low Leakage Current, Maximum of 1µA@5Vdc
- Very low Clamping voltage
- IEC 61000-4-2 ESD 15kV air, 8kV Contact Compliance
- In compliance with EU RoHS 2002/95/EC directivess

### 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 µs Waveform)	P <sub>PP</sub>	100	W
Maximum Peak Pulse Current (8/20 µs 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

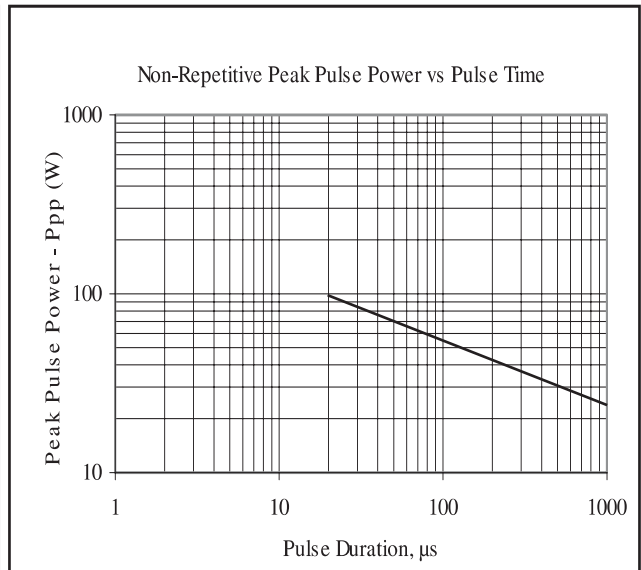
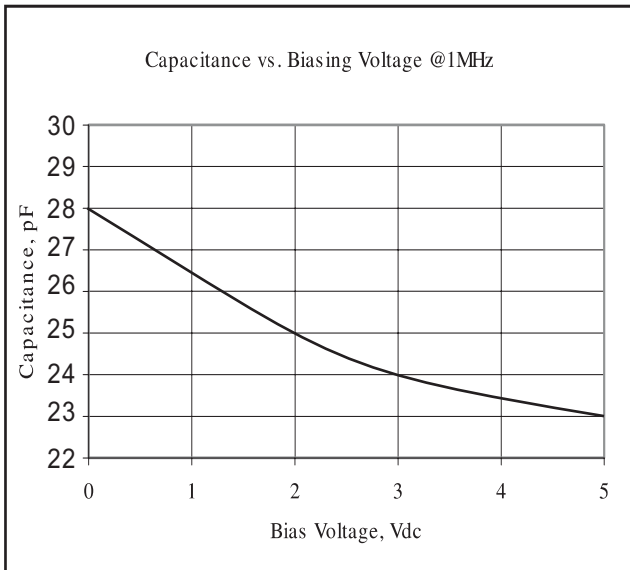
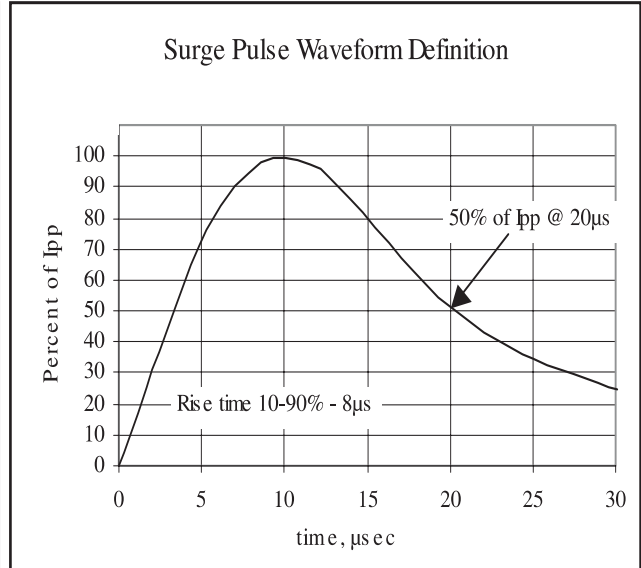
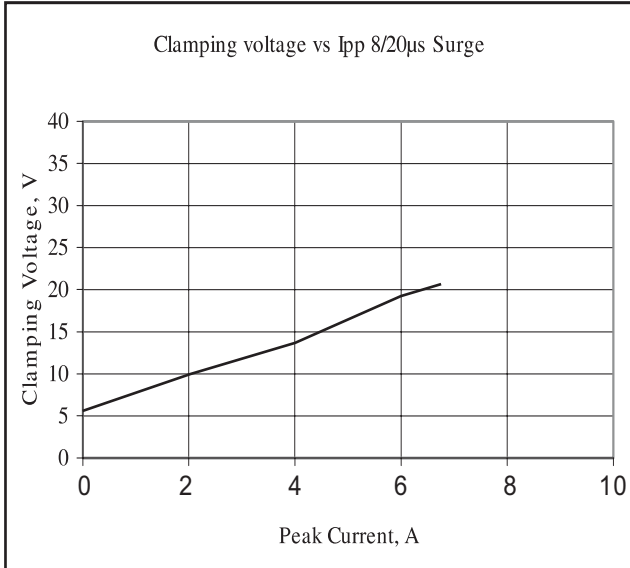
### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

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	µA
Clamping Voltage (8/20µs)	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



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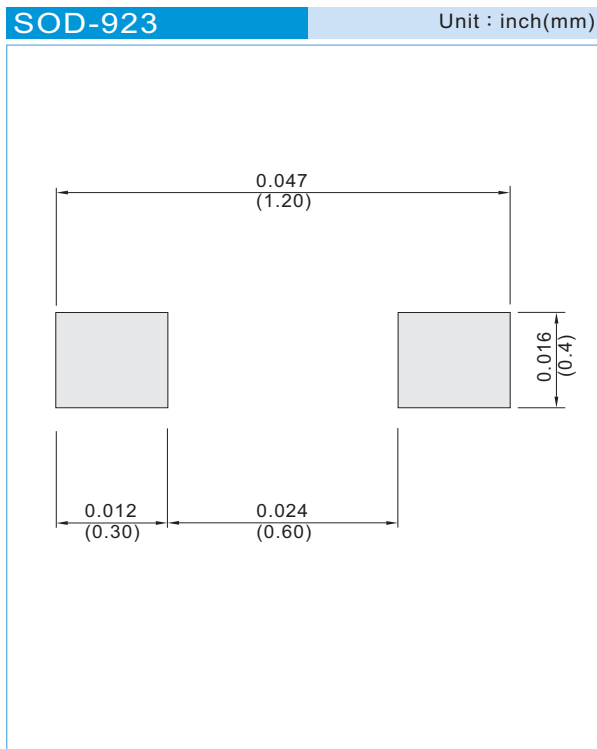
## TYPICAL CHARACTERISTICS





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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information

T/R - 8K per 7" plastic Reel

## LEGAL STATEMENT

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