

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

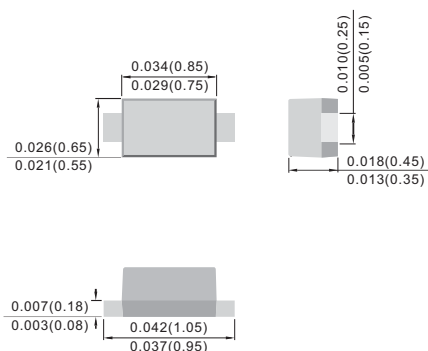
- 100W Power Dissipation (8/20 μ s Waveform)
- Low Leakage Current, Maximum of 1 μ A@5Vdc
- Very low Clamping voltage
- IEC 61000-4-2 ESD 15kV air, 8kV Contact Compliance
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

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 : 0.0005 grams
- Marking : H

SOD-923

Unit : inch(mm)



MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power (8/20 μ s Waveform)	P _{PP}	100	W
Maximum Peak Pulse Current (8/20 μ s Waveform)	I _{PP}	5.0	A
ESD Voltage (HBM)	V _{ESD}	>25	kV
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to 125	°C

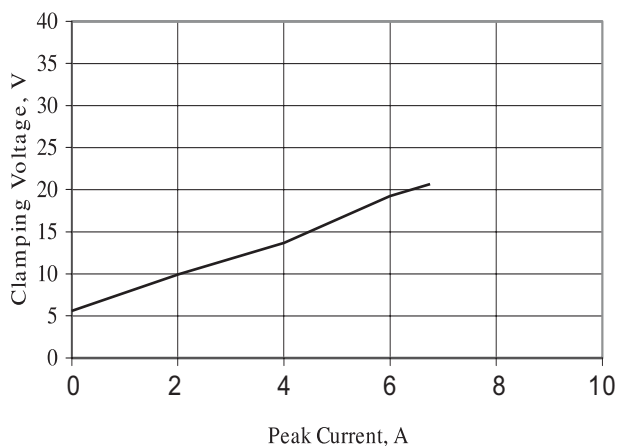
ELECTRICAL CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V _{WRM}		-	-	5.0	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1mA	5.78	-	7.82	V
Reverse Leakage Current	I _R	V _R =5V	-	-	1.0	μ A
Clamping Voltage (8/20 μ s)	V _C	I _{PP} =1A	-	-	12.5	V
Off State Junction Capacitance	C _J	0 Vdc Bias f=1MHz	-	-	30	pF

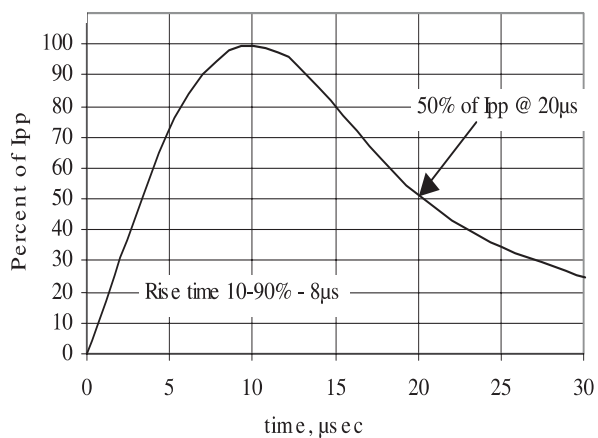
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TYPICAL CHARACTERISTICS

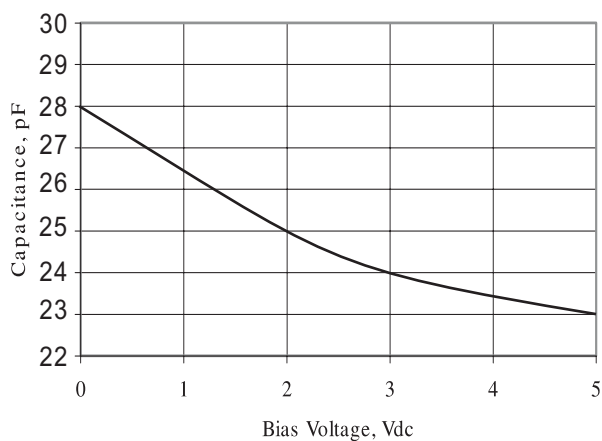
Clamping voltage vs I_{pp} 8/20 μ s Surge



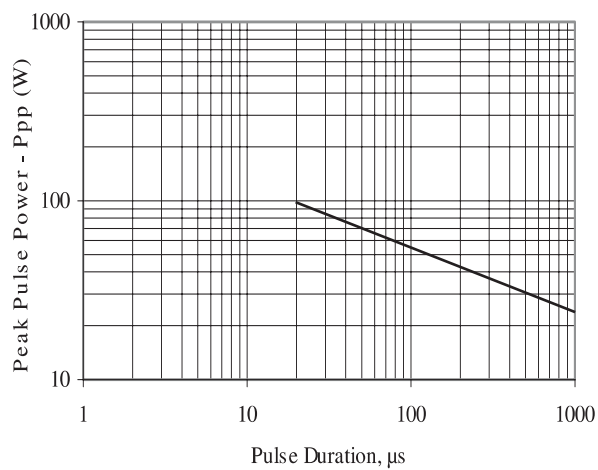
Surge Pulse Waveform Definition



Capacitance vs. Biasing Voltage @1MHz

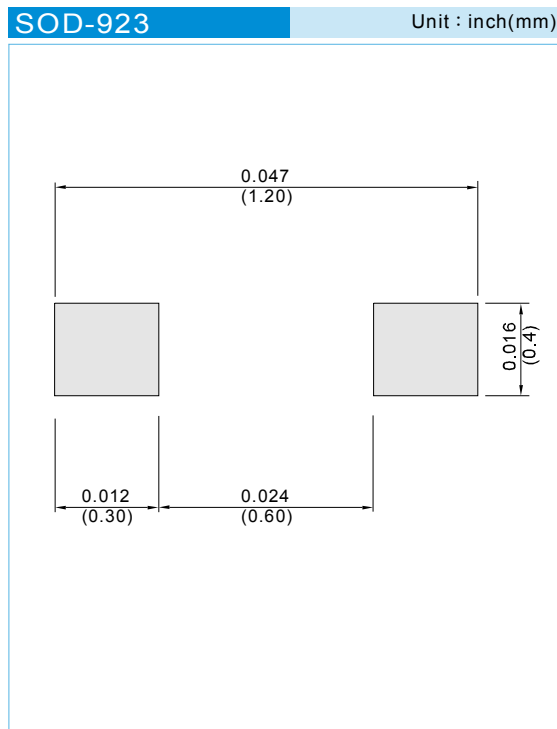


Non-Repetitive Peak Pulse Power vs Pulse Time



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information

T/R - 8K per 7" plastic Reel

PJSD05CTM

Part No_packing code_Version

PJSD05CTM_R1_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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



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