



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.

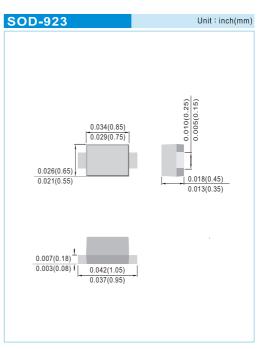
SPECIFICATION FEATURES

- 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
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- 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





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

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power (8/20 μs Waveform)	Ррр	50	W
Peak Pulse Current (8/20 μs Waveform)	І РРМ	3	А
IEC61000-4-2 Contact	VESD	<u>+</u> 8	kV
IEC61000-4-2 Air	VESD	<u>+</u> 15	kV
Operating Junction and Storage Temperature Range	ТЈ,Тѕтс	-55 to +150	°C

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

PARAMETER	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	Vrwm		-	-	3.3	V
Reverse Breakdown Voltage	VBR	I BR=1mA	5.4	-	7.0	V
Reverse Leakage Current	l R	VR=3.3V	-	-	2.5	μΑ
Clamping Voltage (8/20ms)	Vc	IPP=3A	-	14	16.6	V
Off State Junction Capacitance	Cı	0 Vdc Bias f=1MHz	-	13	-	pF





CHARACTERISTIC CURVES

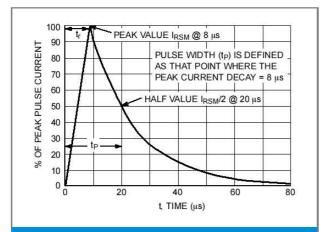


Fig.1 8X20us Pulse Waveform

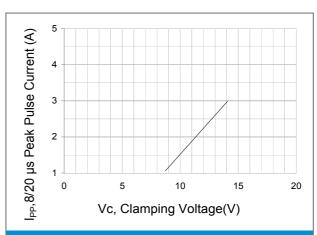


Fig.2 Typical Peak Clamping Voltage

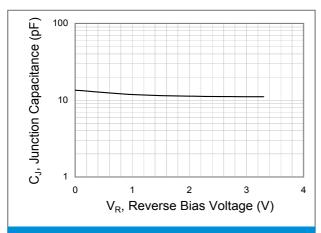


Fig.3 Typical Junction Capacitance

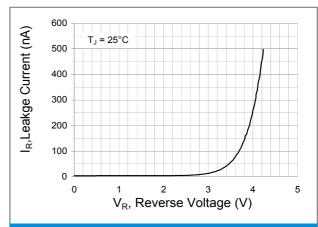
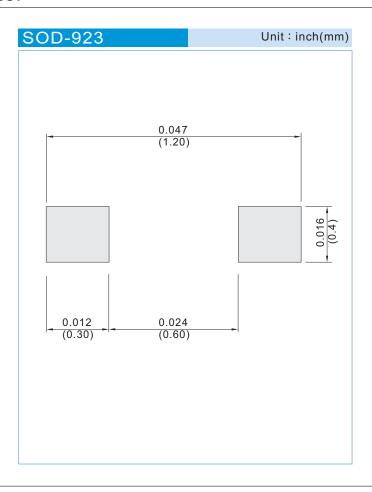


Fig.4 Typical Reverse Characteristics





MOUNTING PAD LAYOUT



ORDER INFORMATION

Packing information

T/R - 8K per 7" plastic Reel





Part No_packing code_Version

PJSD03LCTM_R1_00001

For example:



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)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	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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