

PJEC3V0V1WS

Very Low Capacitance TVS/ESD Protection

V_{RWM}

3 V

Features

- Bidirectional ESD protection of one line
- IEC61000-4-2(ESD):±30kV Air,±30kV Contact Compliance
- IEC61000-4-4(EFT):40A(5/50nS)
- IEC61000-4-5(Lightning):15A(8/20uS)
- Very Low Capacitance:1.2 pF Maximum
- Protect one data, control or power line
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std.
(Halogen Free)

Mechanical Data

- Case: SOD-323, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00014 ounces, 0.0041 grams
- Marking: B1

Applications

- Mobile Phones and accessories
- Desktops, Servers and Notebook
- Hand held portable
- Digital Cameras
- Computer Interfaces Protection
- Serial and Parallel Ports Protection
- Control Signal Lines Protection

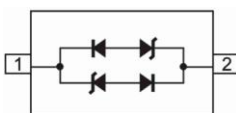
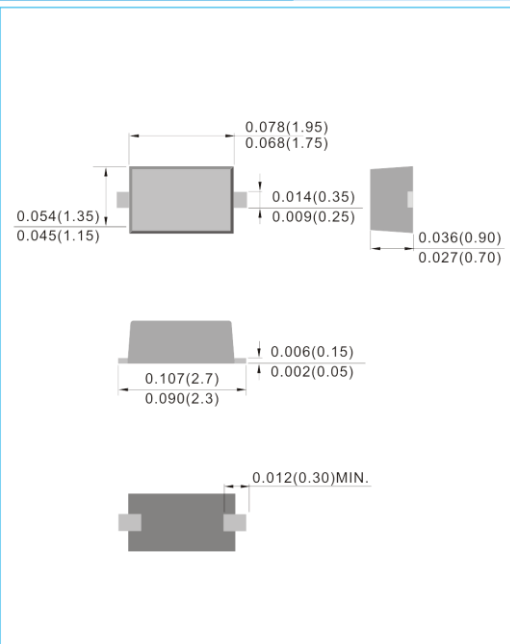


Fig.97(TOP VIEW)

SOD-323

Unit : inch(mm)



Maximum Ratings (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air)	V _{ESD}	±30	kV
ESD IEC61000-4-2(Contact)		±30	
Operating Junction Temperature	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C



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Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	3.0	V
Reverse Break Voltage	V_{BR}	$I_T=1\text{mA}$	4.75	-	5.25	V
Reverse Leakage Current	I_R	$V_R=3.0\text{V}$	-	-	20	μA
Clamping Voltage	V_{CL}	$I_{PP}=1\text{A}$, $t_P=8/20\mu\text{s}$	-	-	7.5	V
		$I_{PP}=5\text{A}$, $t_P=8/20\mu\text{s}$	-	10.5	-	
Clamping Voltage TLP(Note 1)	V_{CL}	$I_{PP}=4\text{A}$, $t_P=100\text{ns}$	-	10	-	V
		$I_{PP}=8\text{A}$, $t_P=100\text{ns}$	-	13	-	
Dynamic Resistance	R_{DYN}	$t_P=100\text{ns}$	-	0.75	-	Ω
Off State Junction Capacitance	C_J	0Vdc Bias $f=1\text{MHz}$	-	0.9	1.2	pF

NOTE :

1. Testing using Transmission Line Pulse (TLP) conditions: $Z_0 = 50\Omega$, $t_P = 100\text{ns}$.

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TYPICAL CHARACTERISTIC CURVES

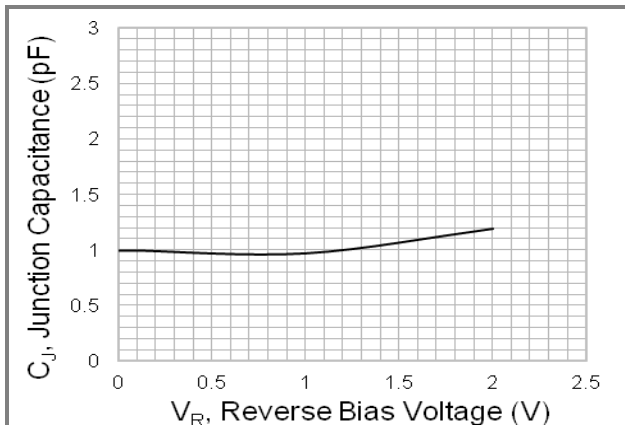


Fig.1 Typical Junction Capacitance

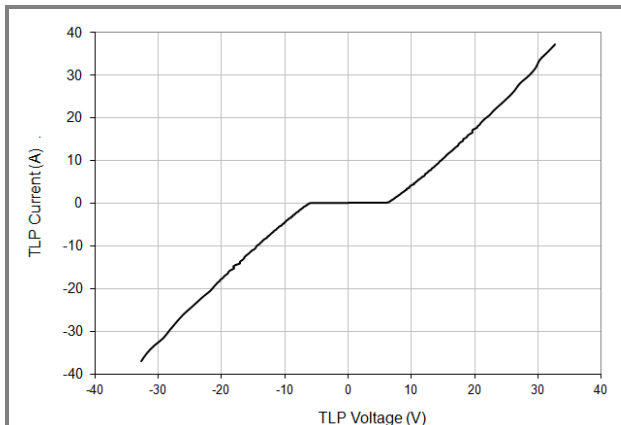


Fig.2 Transmission Line Pulsing (TLP) Measurement

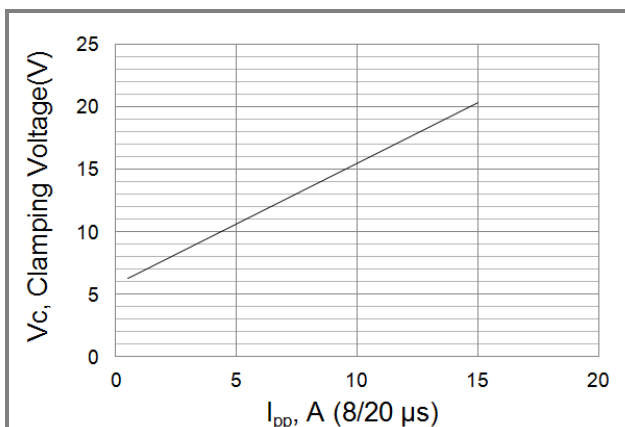


Fig.3 Typical Peak Clamping Voltage(8/20μs)

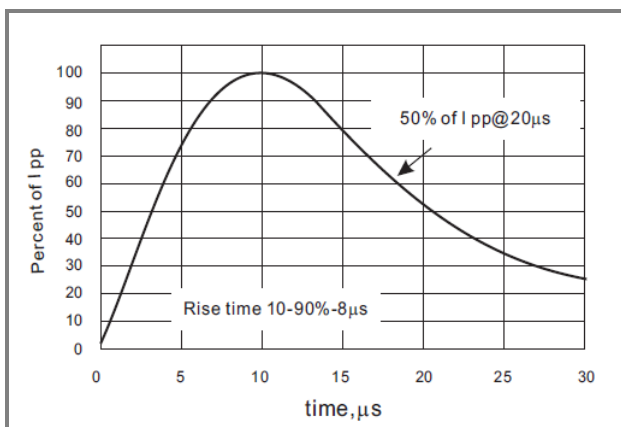


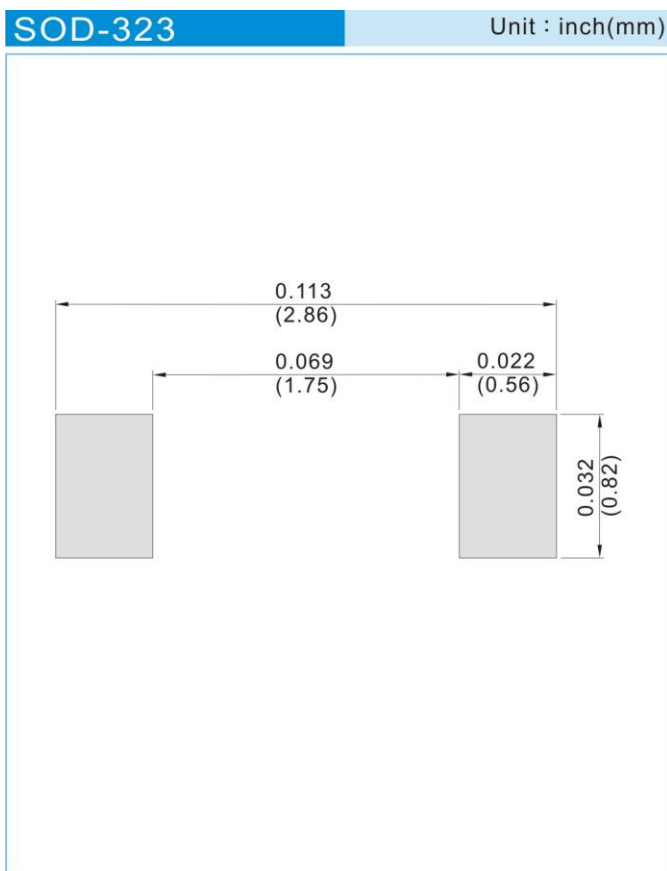
Fig.4 8/20 Pulse Waveform

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PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing type	Marking	Version
PJEC3V0V1WS_R1_00001	SOD-323	5K pcs / 7" reel	B1	Halogen free
PJEC3V0V1WS_R2_00001	SOD-323	12K pcs / 13" reel	B1	Halogen free

MOUNTING PAD LAYOUT





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