



PJEC2415VM1WS-AU

ESD Protection

V_{RWM}

24V/15V

Features

- Bidirectional ESD protection of one line
- IEC61000-4-2(ESD): $\pm 15\text{kV}$ Air, $\pm 8\text{kV}$ Contact Compliance with the capability up to $\pm 30\text{kV}$
- IEC61000-4-4(EFT): 40A(5/50nS)
- IEC61000-4-5(Lightning): 3A(8/20 μ S)
- Low leakage current, maximum of 0.05 μ A at rated voltage
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

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

Applications

- LIN-bus protection
- Automotive application

SOD-323

Unit : inch(mm)

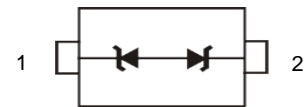
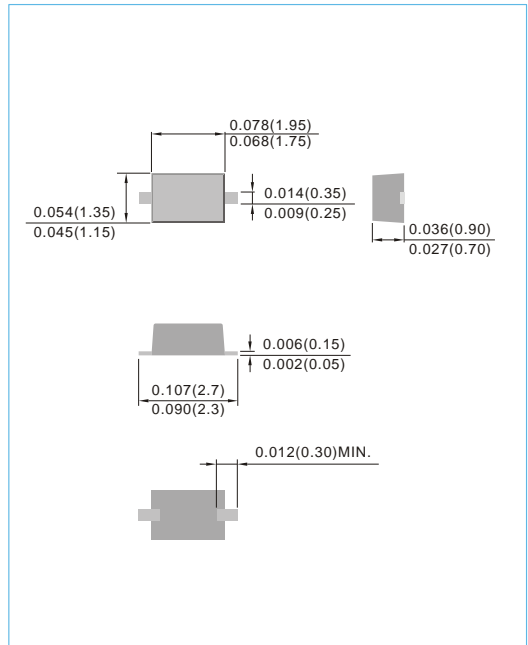


Fig.130(TOP VIEW)



Cathode 1 (15V)
Cathode 2 (24V)

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

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation($t_p=8/20\mu\text{s}$)	P_{PP}	160	W
ESD IEC61000-4-2(Air)	V_{ESD}	± 30	kV
ESD IEC61000-4-2(Contact)		± 30	
Operating Junction Temperature	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$



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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 (24V)	V_{RWM}	-	-	-	24	V
Reverse Stand-Off Voltage (15V)		-	-	-	15	V
Reverse Breakdown Voltage (24V)	V_{BR}	$I_{BR}=5\text{mA}$	25.4	-	30.3	V
Reverse Breakdown Voltage (15V)			17.1	-	20.3	V
Reverse Leakage Current (24V)	I_R	$V_R=24\text{V}$	-	1	50	nA
Reverse Leakage Current (15V)		$V_R=15\text{V}$	-	1	50	
Clamping Voltage (24V)	V_{CL}	$I_{PP}=1\text{A}, t_P=8/20\mu\text{s}$	-	-	40	V
		$I_{PP}=3\text{A}, t_P=8/20\mu\text{s}$	-	-	50	
Clamping Voltage (15V)		$I_{PP}=1\text{A}, t_P=8/20\mu\text{s}$	-	-	25	
		$I_{PP}=5\text{A}, t_P=8/20\mu\text{s}$	-	-	35	
Off State Junction Capacitance	C_J	0Vdc Bias f=1MHz	-	13	17	pF



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TYPICAL CHARACTERISTIC CURVES

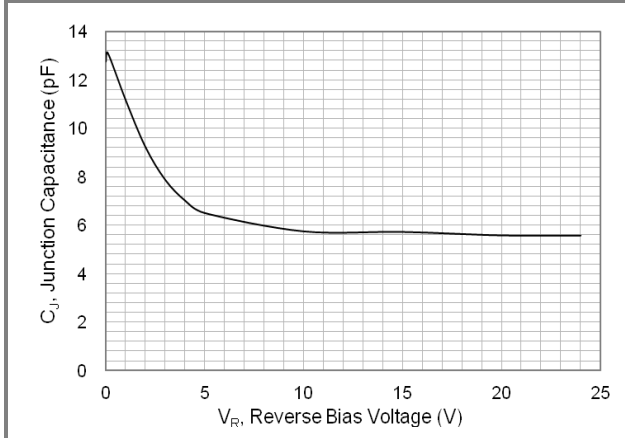


Fig.1 Typical Junction Capacitance(24V)

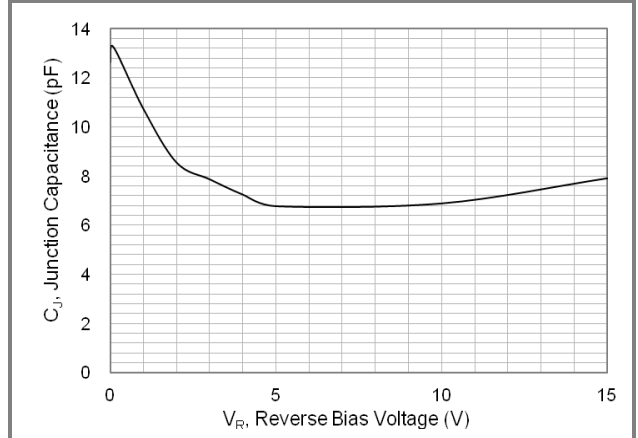


Fig.2 Typical Junction Capacitance(15V)

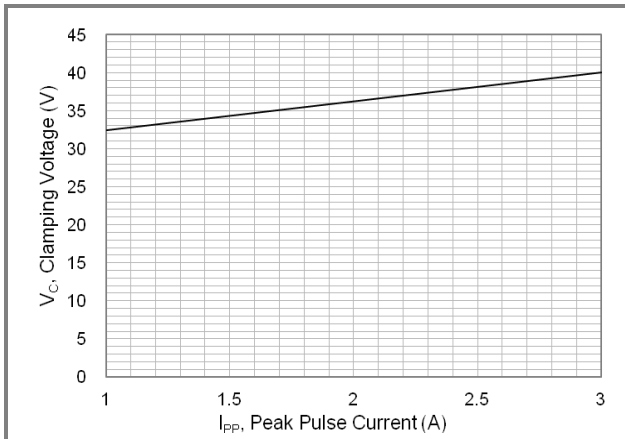


Fig.3 Typical Peak Clamping Voltage(8/20µs)(24V)

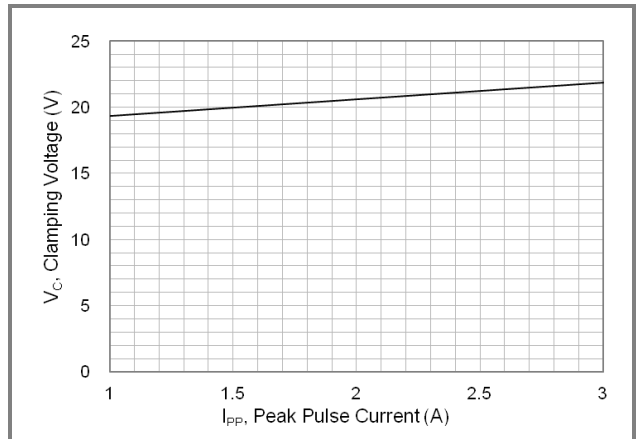


Fig.4 Typical Peak Clamping Voltage(8/20µs)(15V)

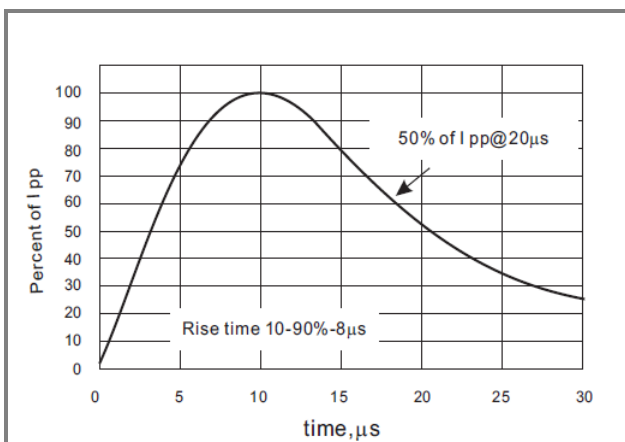


Fig.5 8/20µs Pulse Waveform

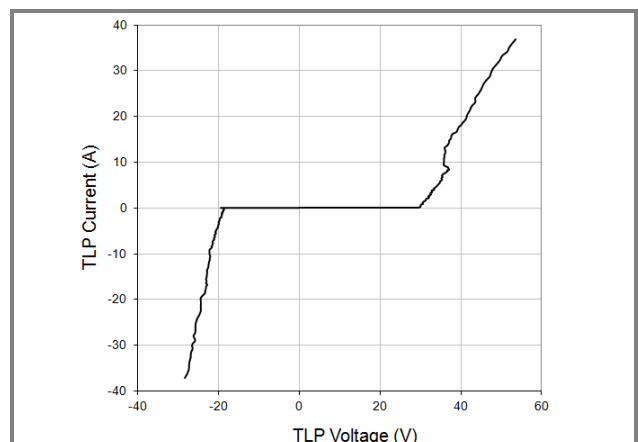
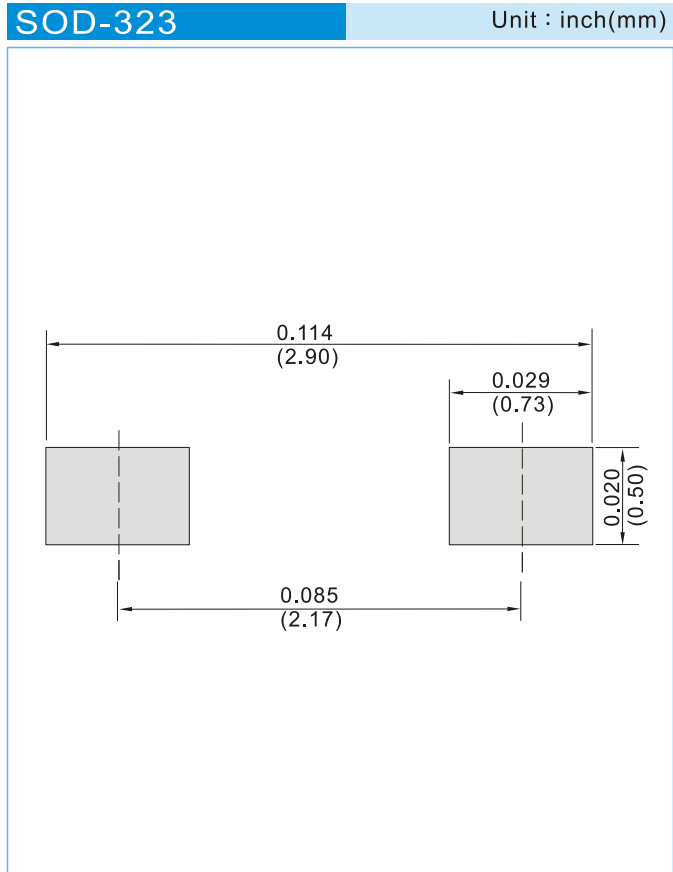


Fig.6 Transmission Line Pulsing (TLP) Measurement



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R – 12K per 13" plastic Reel
T/R – 5K per 7" plastic Reel



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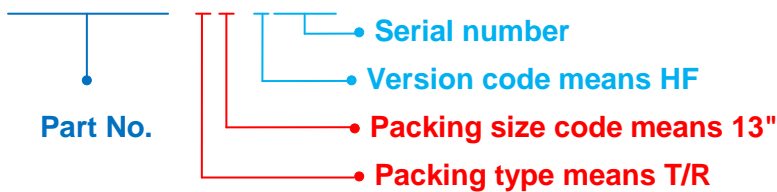
Part No_packing code_Version

PJEC2415VM1WS-AU_R1_000A1

PJEC2415VM1WS-AU_R2_000A1

For example :

RB500V-40_R2_00001



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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