PJEC2415VM1WS-AU

ESD Protection

V_{RWM}	24V/15V

Features

- Bidirectional ESD protection of one line
- IEC61000-4-2(ESD): ±15kV Air, ±8kV Contact Compliance with the capability up to ±30kV
- IEC61000-4-4(EFT): 40A(5/50nS)
- IEC61000-4-5(Lightning): 3A(8/20μS)
- Low leakage current, maximum of 0.05μA at rated voltage
- Acqire quality system certificate : TS16949
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std. (Halogen Free)

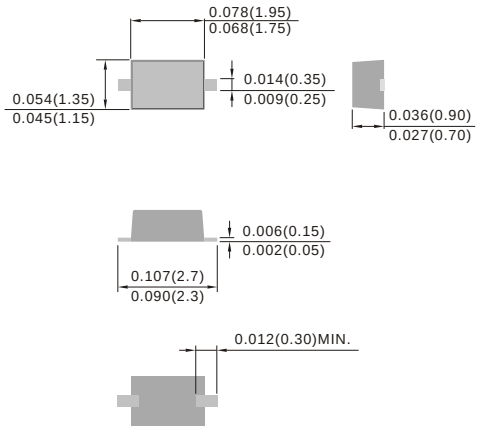
Mechanical Data

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

Applications

- LIN-bus protection
- Automotive application

SOD-323 Unit : inch(mm)



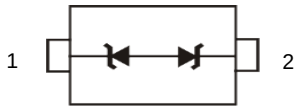


Fig.130(TOP VIEW)



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

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

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

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

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TYPICAL CHARACTERISTIC CURVES

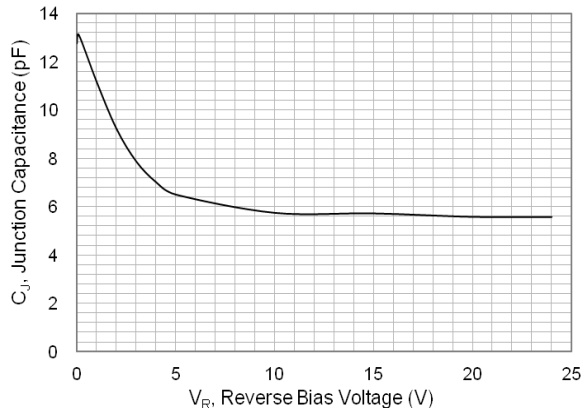


Fig.1 Typical Junction Capacitance(24V)

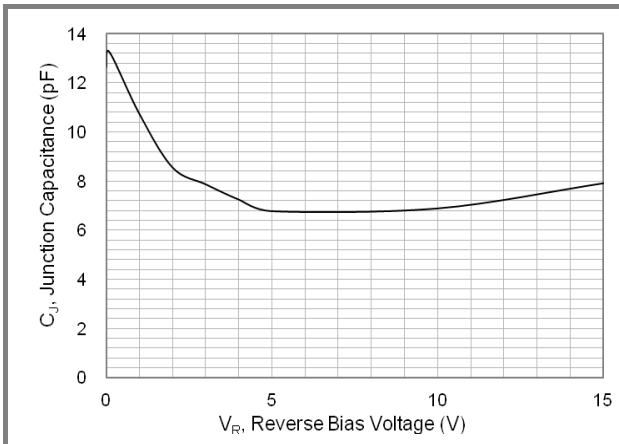


Fig.2 Typical Junction Capacitance(15V)

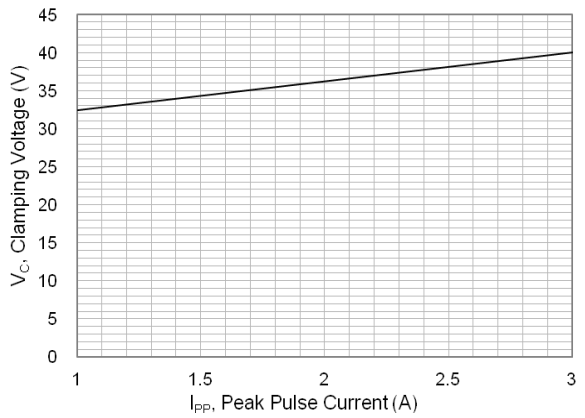


Fig.3 Typical Peak Clamping Voltage(8/20μs)(24V)

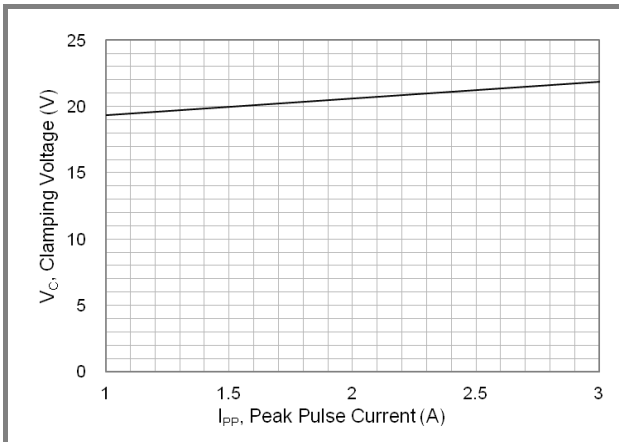


Fig.4 Typical Peak Clamping Voltage(8/20μs)(15V)

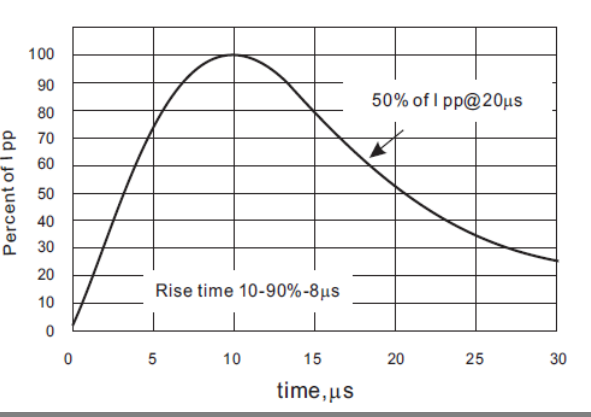


Fig.5 8/20μs Pulse Waveform

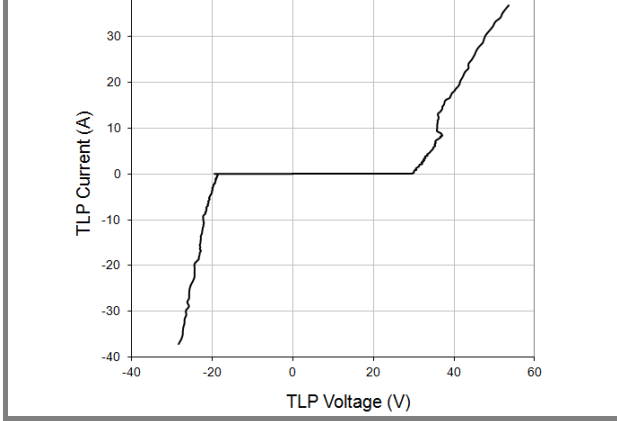
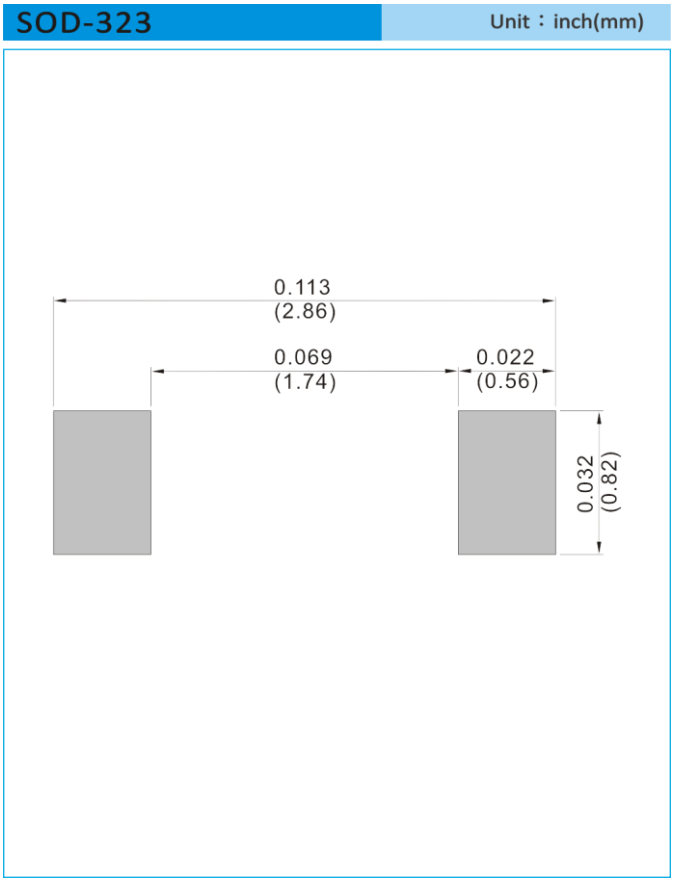


Fig.6 Transmission Line Pulsing (TLP) Measurement

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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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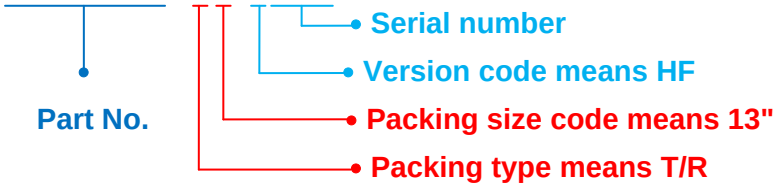
Part No_packing code_Version

PJEC2415VM1WS-AU_R1_000A1

PJEC2415VM1WS-AU_R2_000A1

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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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