

PJEC3V3M1FN2

Low Capacitance TVS/ESD Protection

V_{RWM}

3.3 V

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): 5A(8/20μS)
- Low leakage current, maximum of 0.5μA at rated voltage
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case: DFN 2L, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00004 ounces, 0.0011 grams
- Marking: BG

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

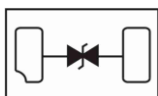
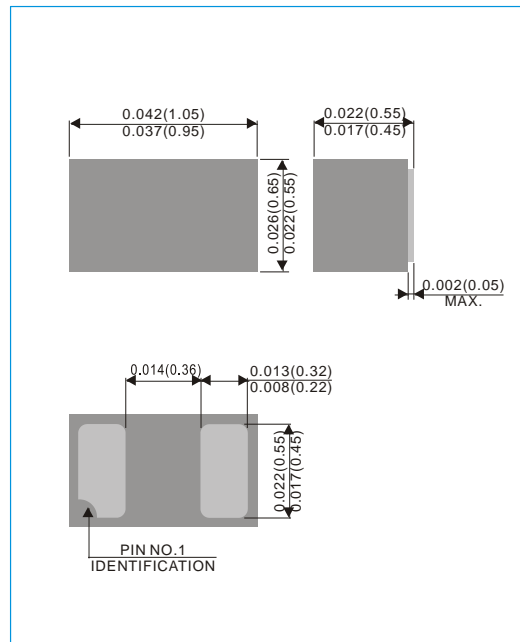


Fig.166(Top View)

DFN 2L

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}	-	-	-	3.3	V
Punch-Trough Voltage	V_{PT}	$I_{PT}=2\mu\text{A}$	3.5	-	-	V
Snap-Break Voltage	V_{SB}	$I_{SB}=50\text{mA}$	2.8	-	-	V
Reverse Leakage Current	I_R	$V_R=3.3\text{V}$	-	-	0.5	μA
Clamping Voltage	V_{CL}	$I_{PP}=1\text{A}$, $t_P=8/20\mu\text{s}$	-	-	6	V
		$I_{PP}=5\text{A}$, $t_P=8/20\mu\text{s}$	-	-	8	
Clamping Voltage TLP (Note 1)	V_{CL}	$I_{PP}=4\text{A}$, $t_P=100\text{ns}$	-	6	-	V
		$I_{PP}=8\text{A}$, $t_P=100\text{ns}$	-	7	-	
Dynamic Resistance	R_{DYN}	$t_P=100\text{ns}$	-	0.25	-	Ω
Off State Junction Capacitance	C_J	0Vdc Bias $f=1\text{MHz}$	-	-	10	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

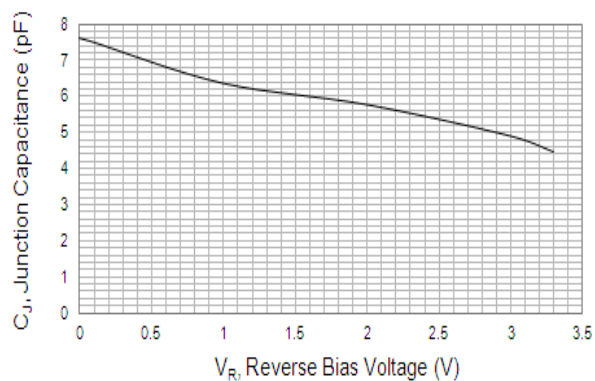


Fig.1 Typical Junction Capacitance

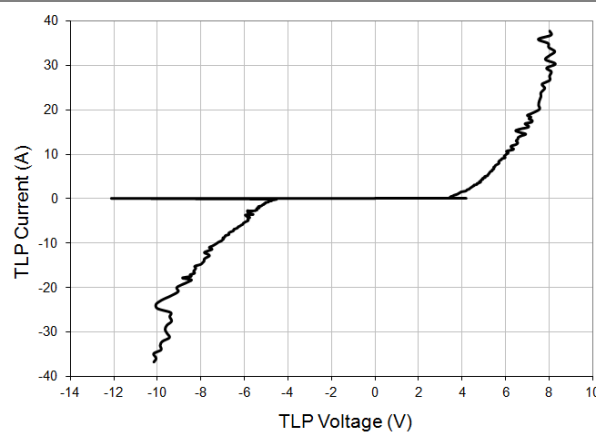


Fig.2 Transmission Line Pulsing (TLP) Measurement

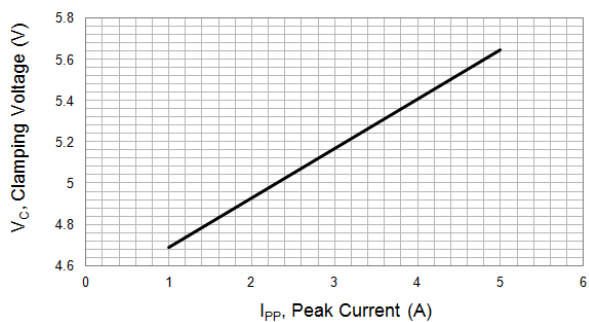


Fig.3 Typical Peak Clamping Voltage(8/20μs)

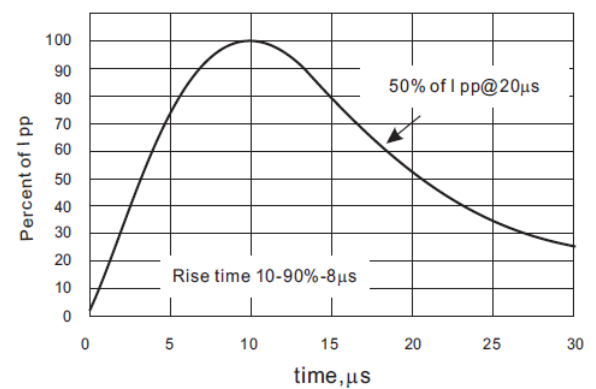


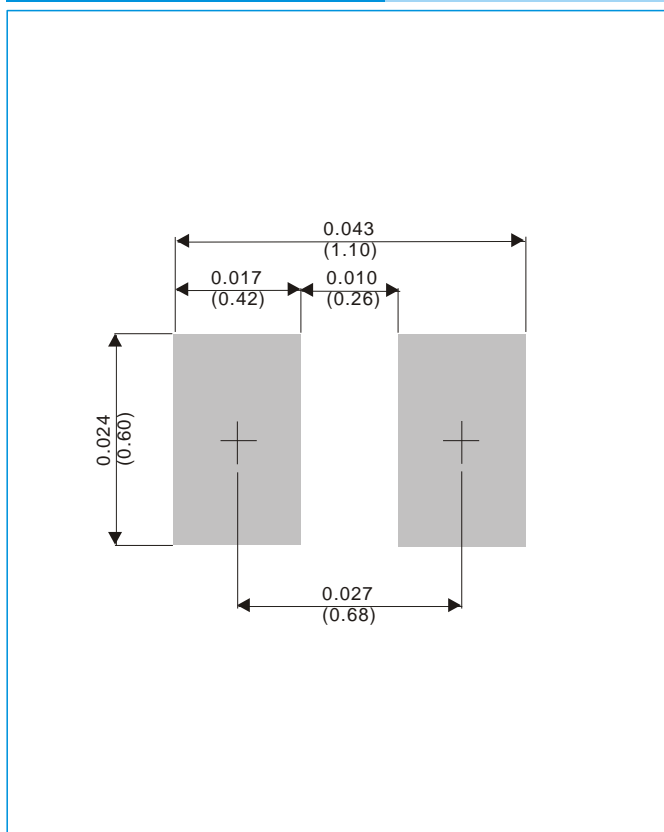
Fig.4 8/20μs Pulse Waveform

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MOUNTING PAD LAYOUT

DFN 2L

Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R – 8K per 7" plastic Reel



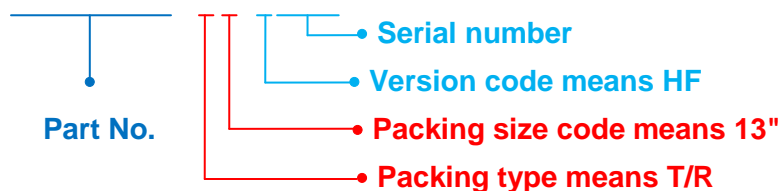
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Part No_packing code_Version

PJEC3V3M1FN2_R1_00001

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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