



PJEC5V0M2FN2

ESD Protection

V_{RWM}

5.0 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 1μA at rated voltage
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std.(Halogen Free)

Mechanical Data

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

Applications

- Mobile Phones and accessories
- Video I/O port protection
- Desktops, Servers and Notebook
- Hand held portable
- Computer Interfaces Protection
- Serial and Parallel Ports Protectionontrol Signal Lines Protection

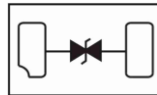
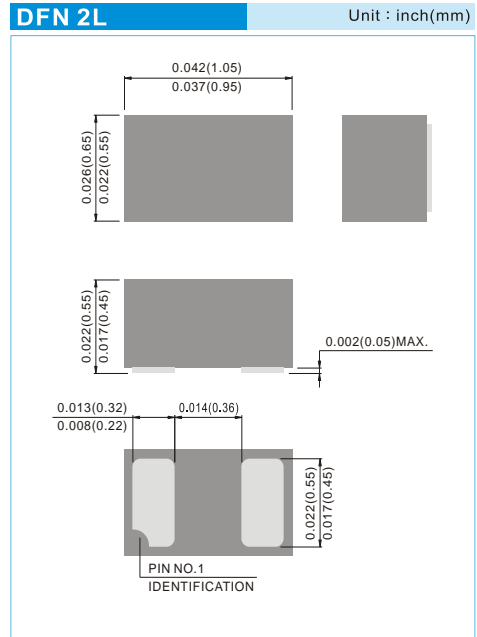


Fig.166(Top View)



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

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation(tp=8/20uS)	P _{PP}	50	W
ESD IEC61000-4-2(Air)	V _{ESD}	±15	kV
ESD IEC61000-4-2(Contact)		±8	
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 ^(Notes 1)	V_{RWM}	-	-	-	5.0	V
Reverse Breakdown Voltage	V_{BR}	$I_{BR}=1\text{mA}$	5.5	-	8	V
Reverse leakage current	I_R	$V_R=5.0\text{V}$	-	-	1	μA
Clamping Voltage	V_{CL}	$I_{PP}=1\text{A}$, $t_p=8/20\mu\text{s}$	-	-	8	V
		$I_{PP}=5\text{A}$, $t_p=8/20\mu\text{s}$	-	-	10	
Clamping Voltage TLP ^(Notes 2)	V_{CL}	$I_{PP}=4\text{A}$, $t_p=100\text{ns}$	-	7.45	-	V
		$I_{PP}=8\text{A}$, $t_p=100\text{ns}$	-	8	-	
Dynamic Resistance ^(Notes 2)	R_{DYN}	$t_p=100\text{ns}$	-	0.14	-	Ω
Off State Junction Capacitance	C_J	0Vdc Bias $f=1\text{MHz}$	-	-	20	pF

NOTES :

1. A transient suppressor is selected according to the working peak reverse voltage(V_{RWM}), which should be equal to or greater than the DC or continuous peak operation voltage level.
2. Testing using Transmission Line Pulse (TLP) conditions: $Z_0 = 50\Omega$, $t_p = 100 \text{ ns}$.



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TYPICAL CHARACTERISTIC CURVES

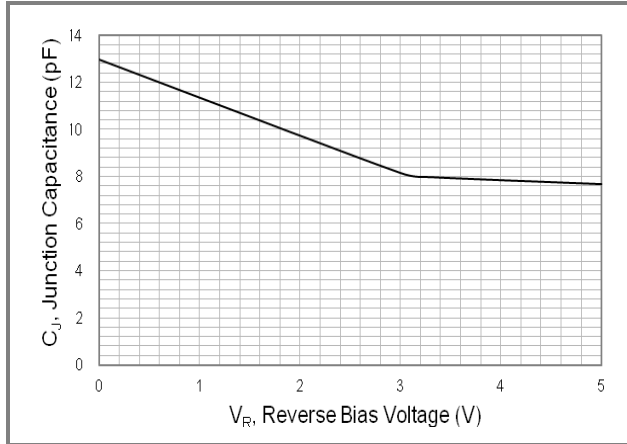


Fig.1 Typical Junction Capacitance

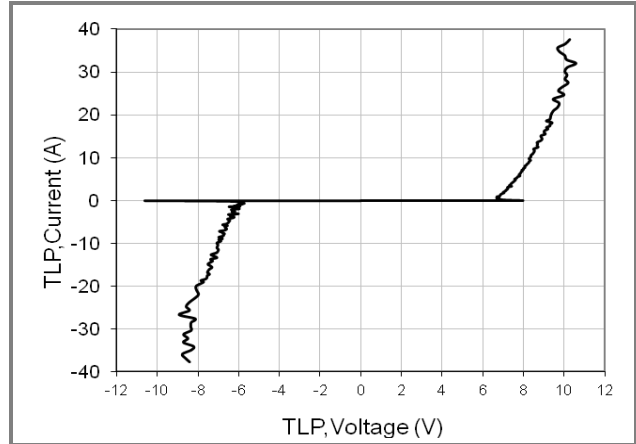


Fig. 2 Transmission Line Pulsing (TLP) Measurement

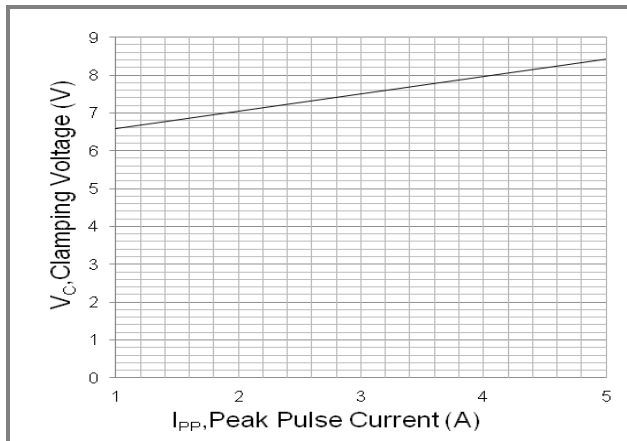


Fig.3 Typical Peak Clamping Voltage(8/20 μ s)

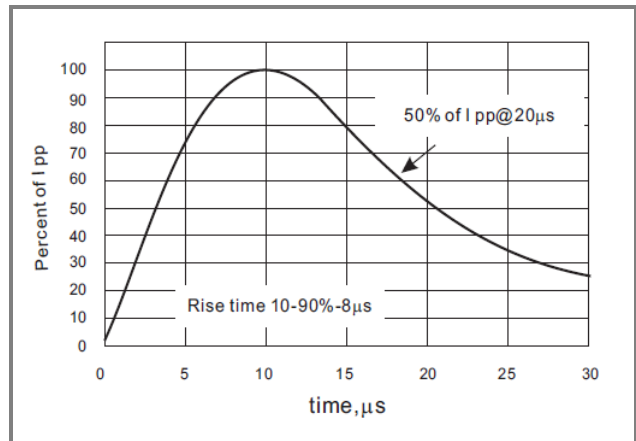
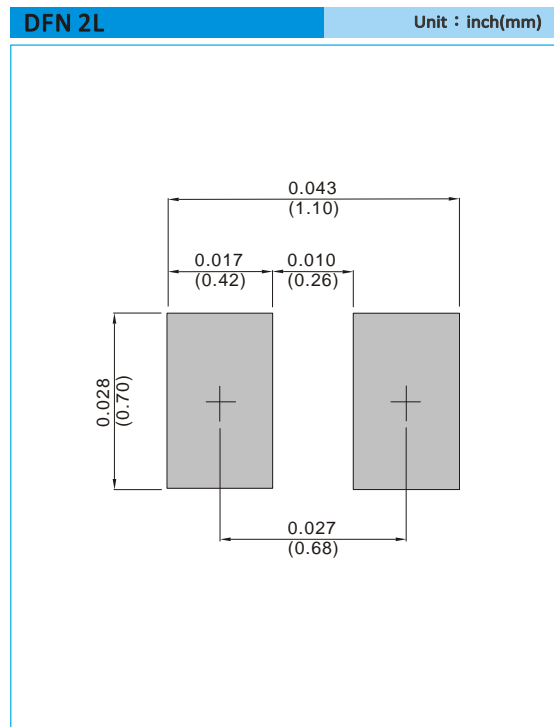


Fig.4 8/20 μ s Pulse Waveform



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MOUNTING PAD LAYOUT



ORDER INFORMATION

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



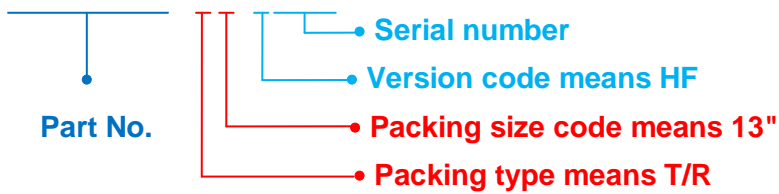
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Part No_packing code_Version

PJEC5V0M2FN2_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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