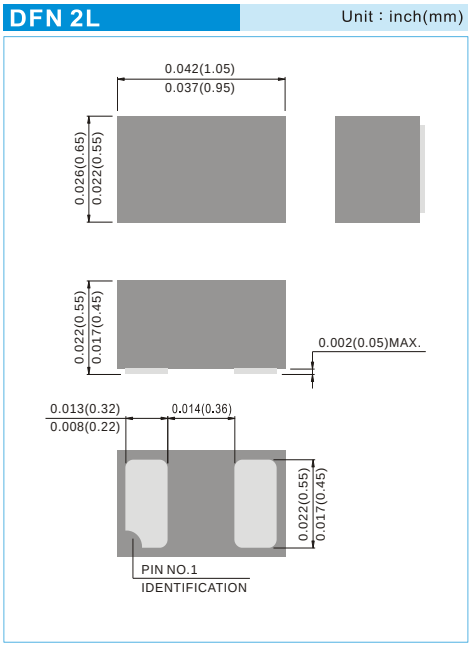
PJEC5V0M2FN2

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

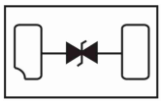


Fig.166(Top View)

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) ESD IEC61000-4-2(Contact)	V_{ESD}	±15 ±8	kV
Operating Junction Temperature	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

PJEC5V0M2FN2

Electrical Characteristics (T_A=25°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}=1mA	5.5	-	8	V
Reverse leakage current	I_R	V_R=5.0V	-	-	1	μA
Clamping Voltage	V_{CL}	I_{PP}=1A, t_P=8/20μs	-	-	8	V
		I_{PP}=5A, t_P=8/20μs	-	-	10	
Clamping Voltage TLP (Notes 2)	V_{CL}	I_{PP}=4A, t_P=100ns	-	7.45	-	V
		I_{PP}=8A, t_P=100ns	-	8	-	
Dynamic Resistance (Notes 2)	R_{DYN}	t_P=100ns	-	0.14	-	Ω
Off State Junction Capacitance	C_J	0Vdc Bias f=1MHz	-	-	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 = 50Ω , t_P = 100 ns.

PJEC5V0M2FN2

TYPICAL CHARACTERISTIC CURVES

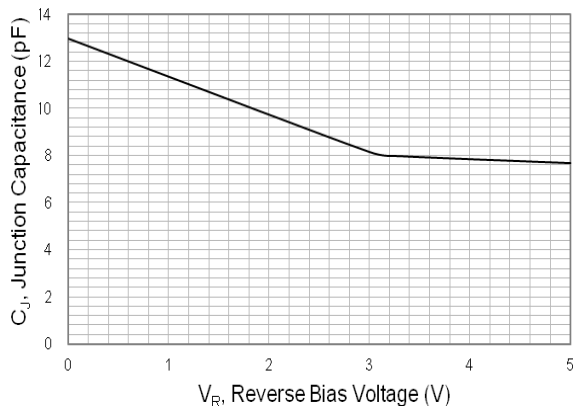


Fig.1 Typical Junction Capacitance

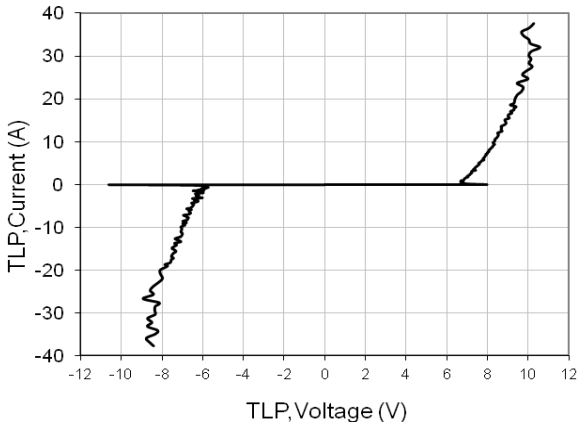


Fig. 2 Transmission Line Pulsing (TLP) Measurement

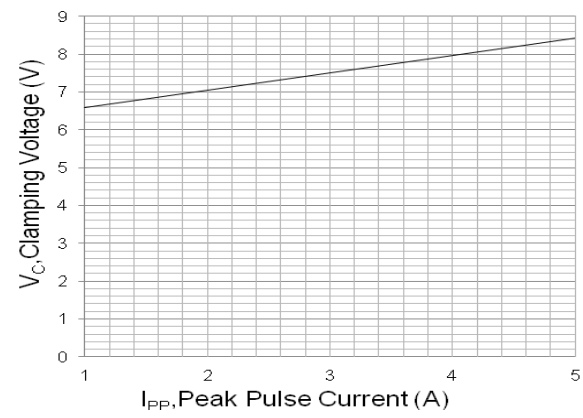


Fig.3 Typical Peak Clamping Voltage(8/20μs)

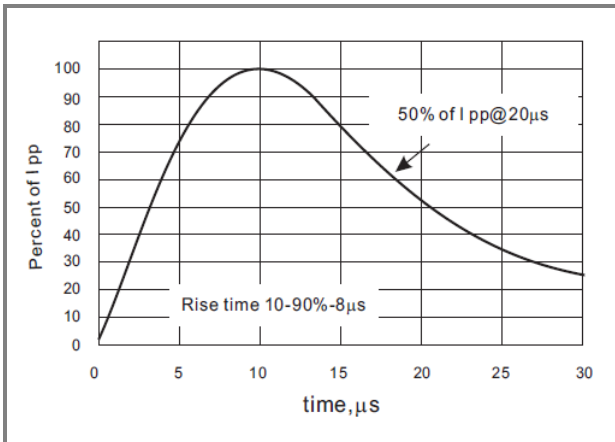
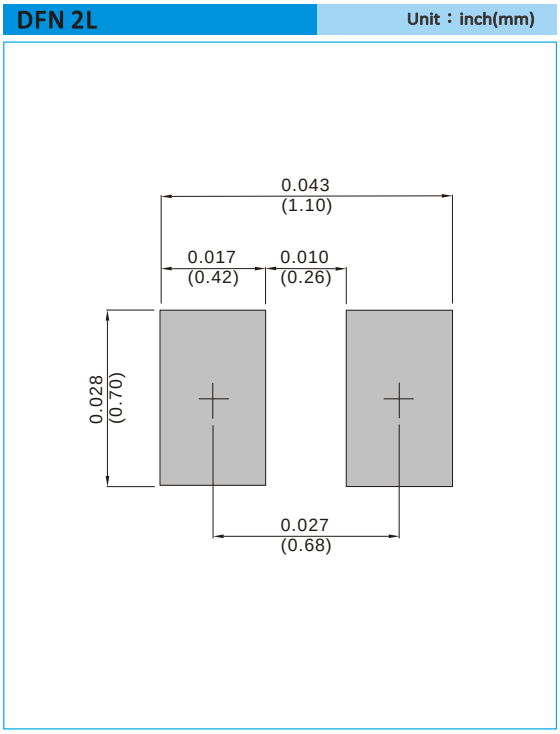


Fig.4 8/20μs Pulse Waveform

PJEC5V0M2FN2

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

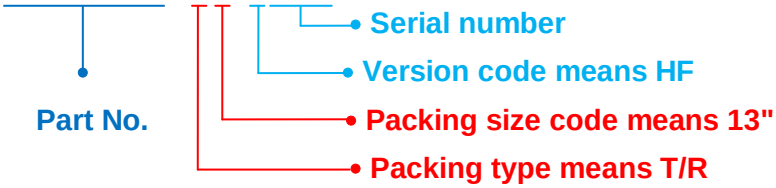
PJEC5V0M2FN2

Part No_packing code_Version

PJEC5V0M2FN2_R1_00001

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			

PJEC5V0M2FN2

Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.