

# PJE24VM5FN2

## ESD Protection

**V<sub>RWM</sub>**

**24 V**

## Features

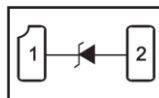
- Unidirectional ESD protection of one line
- IEC61000-4-2(ESD):  $\pm 30\text{kV}$  Air,  $\pm 30\text{kV}$  Contact Compliance
- IEC61000-4-4(EFT): 40A(5/50nS)
- IEC61000-4-5(Lightning): 3A(8/20 $\mu$ S)
- Low leakage current, maximum of 0.1 $\mu$ A at rated voltage
- Lead free in compliance with EU 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: AM

## Applications

- Mobile Phones and accessories
- Desktops, Servers and Notebook
- Hand held portable
- Digital Cameras
- Computer Interfaces Protection
- Serial and Parallel Ports Protection

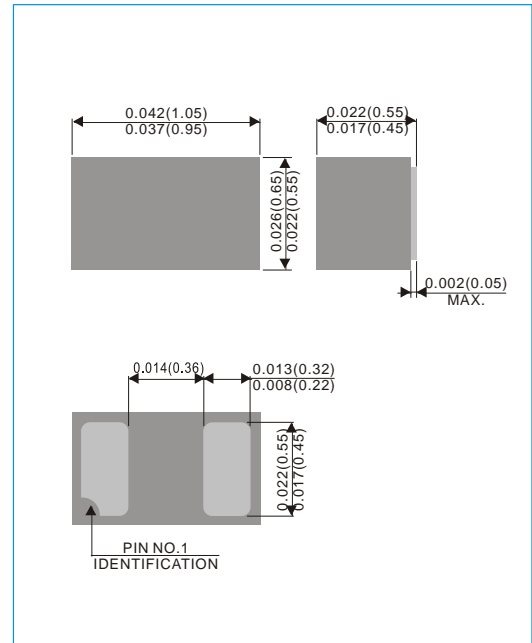


Cathode Anode

Fig.30(Top View)

## DFN 2L

Unit : inch(mm)



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

PARAMETER	SYMBOL	LIMIT	UNITS
Peak Pulse Power Dissipation( $t_p=8/20\mu\text{S}$ )	$P_{PP}$	100	W
ESD IEC61000-4-2(Air)	$V_{ESD}$	$\pm 30$	kV
ESD IEC61000-4-2(Contact)		$\pm 30$	
Operating Junction Temperature	$T_J$	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$



## PJE24VM5FN2

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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	24	V
Reverse Breakdown Voltage	$V_{BR}$	$I_{BR}=1\text{mA}$	25	-	29	V
Reverse leakage current	$I_R$	$V_R=24\text{V}$	-	-	0.1	$\mu\text{A}$
Clamping Voltage	$V_{CL}$	$I_{PP}=1\text{A}$ , $t_p=8/20\mu\text{s}$	-	30	40	V
		$I_{PP}=3\text{A}$ , $t_p=8/20\mu\text{s}$	-	35	-	
Clamping Voltage TLP (Notes 1)	$V_{CL}$	$I_{PP}=4\text{A}$ , $t_p=100\text{ns}$	-	30.6	-	V
		$I_{PP}=8\text{A}$ , $t_p=100\text{ns}$	-	32.5	-	
Dynamic Resistance (Notes 1)	$R_{DYN}$	$t_p=100\text{ns}$	-	0.48	-	$\Omega$
Off State Junction Capacitance	$C_J$	0Vdc Bias $f=1\text{MHz}$	-	-	50	pF

NOTES :

1. Testing using Transmission Line Pulse (TLP) conditions:  $Z_0 = 50\Omega$ ,  $t_p = 100\text{ ns}$ .

## PJE24VM5FN2

### TYPICAL CHARACTERISTIC CURVES

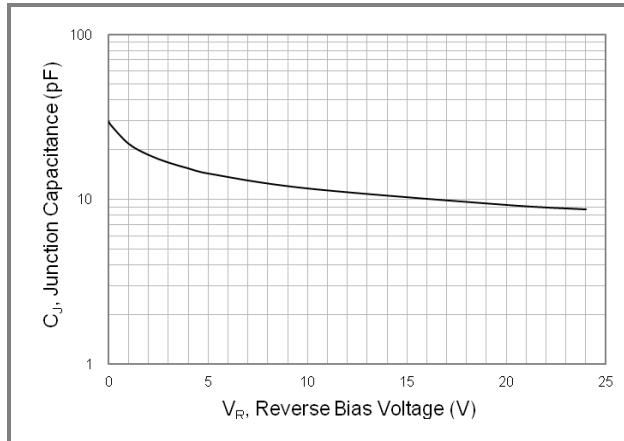


Fig.1 Typical Junction Capacitance

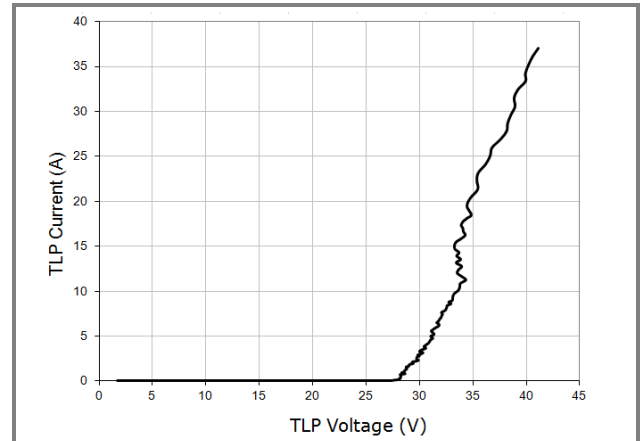


Fig.2 Transmission Line Pulsing (TLP) Measurement

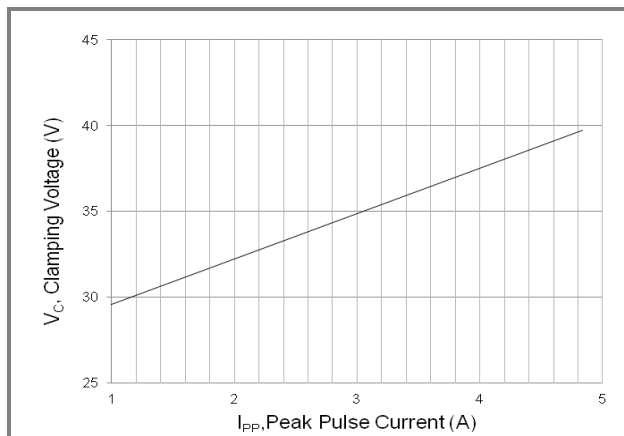


Fig.3 Typical Peak Clamping Voltage(8/20μs)

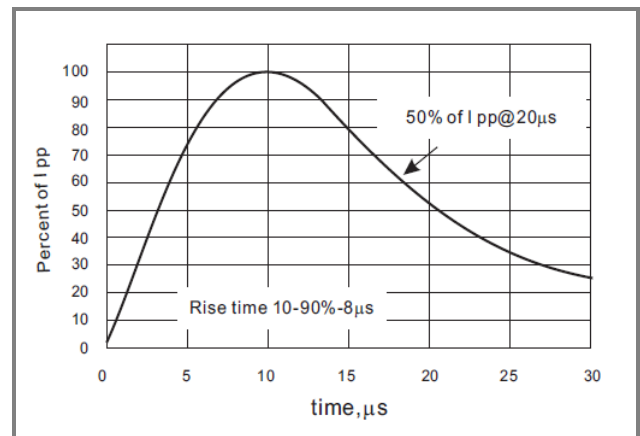


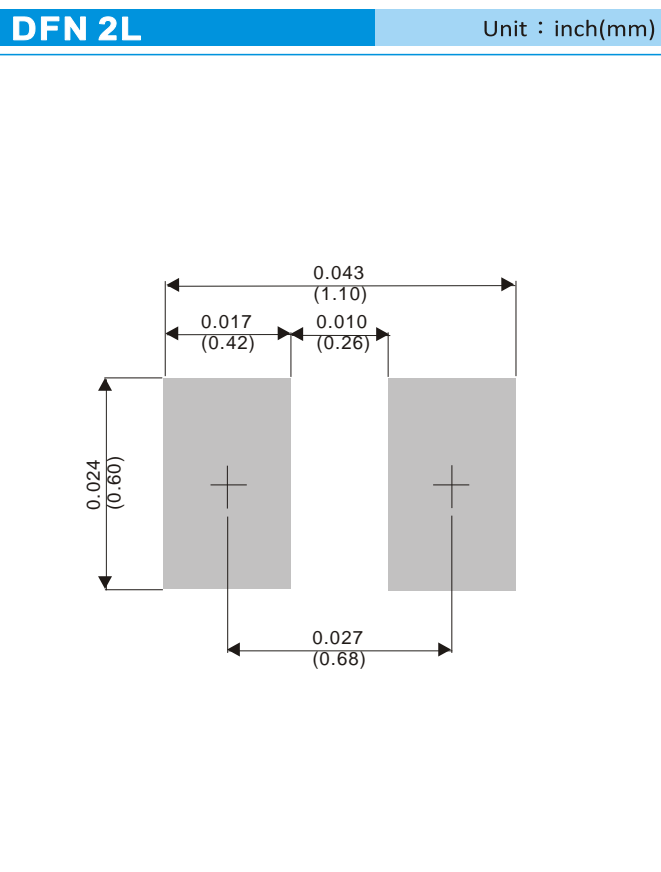
Fig.4 8/20μs Pulse Waveform

# PJE24VM5FN2

PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
PJE24VM5FN2_R1_00001	DFN 2L	8K pcs / 7" reel	AM	Halogen free

MOUNTING PAD LAYOUT





## PJE24VM5FN2

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