



# PJE24VM5FN2

## ESD Protection

$V_{RWM}$

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(8/20uS)
- Low leakage current, maximum of 0.1uA at rated voltage
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

## Mechanical Data

- Case : DFN1006-2L Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0006 grams

## DFN1006-2L



## Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air)	$V_{ESD}$	$\pm 30$	kV
ESD IEC61000-4-2(Contact)		$\pm 30$	
Operating Junction Temperature Range	$T_J$	-55~125	°C
Storage Temperature Range	$T_{STG}$	-55~150	°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	$V_{CL}$	$I_{PP} = 1 \text{ A}, t_P = 8/20 \text{ us}$	-	30	40	V
		$I_{PP} = 3 \text{ A}, t_P = 8/20 \text{ us}$	-	35	-	V
Clamping Voltage TLP <sup>(Note 1)</sup>	$V_{CL}$	$I_{PP} = 4 \text{ A}, t_P = 100 \text{ ns}$	-	30.6	-	V
		$I_{PP} = 8 \text{ A}, t_P = 100 \text{ ns}$	-	32.5	-	V
Dynamic Resistance <sup>(Note 1)</sup>	$R_{DYN}$	$t_P = 100 \text{ ns}$	-	0.48	-	$\Omega$
Off State Junction Capacitance	$C_J$	0 Vdc Bias $f = 1 \text{ MHz}$	-	-	50	pF

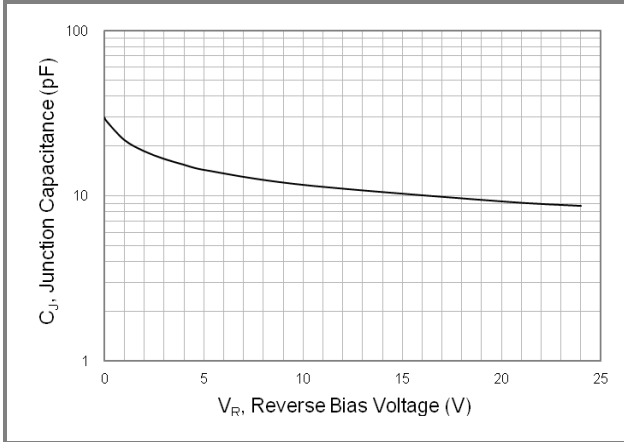
NOTES :

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

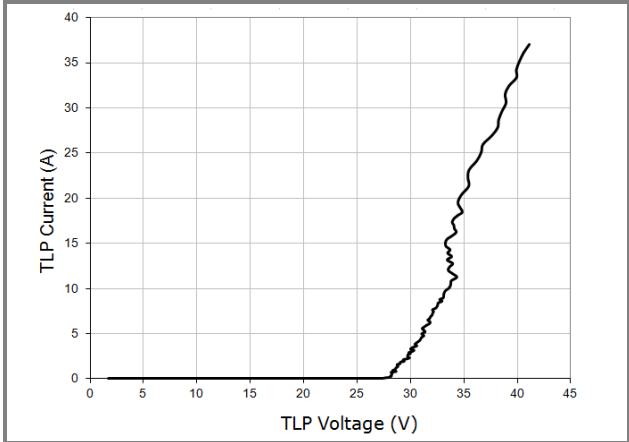


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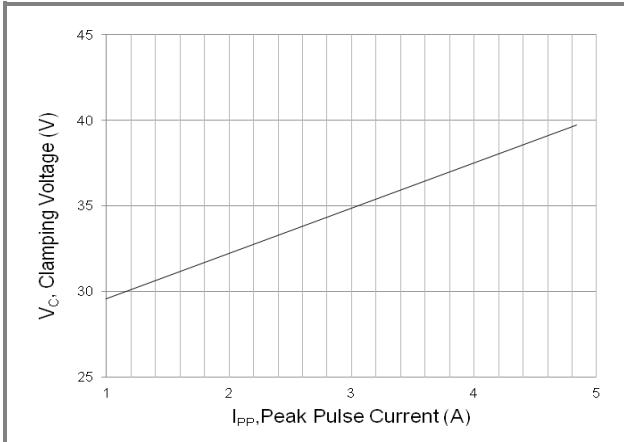
## TYPICAL CHARACTERISTIC CURVES



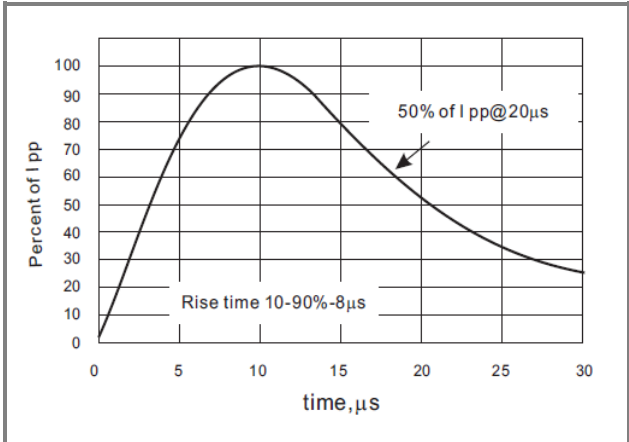
**Fig.1 Typical Junction Capacitance**



**Fig.2 Transmission Line Pulsing (TLP) Measurement**



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



**Fig.4 8/20us Pulse Waveform**

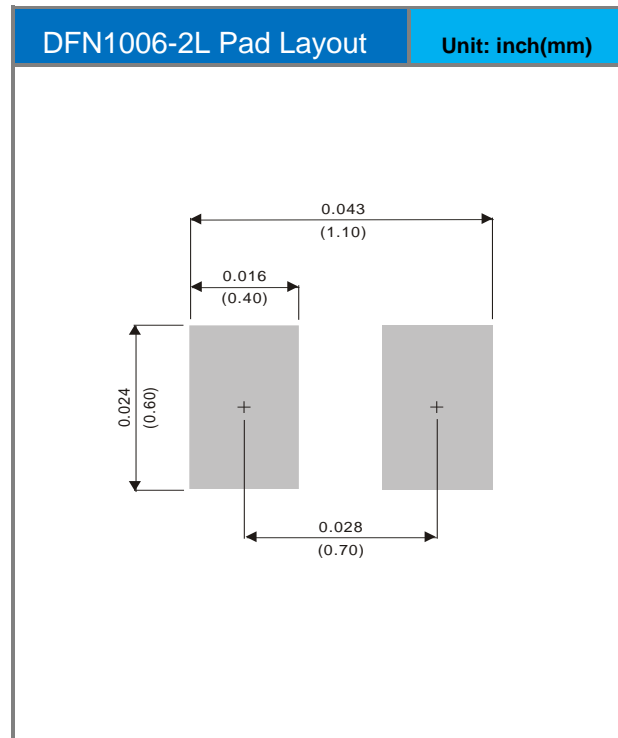
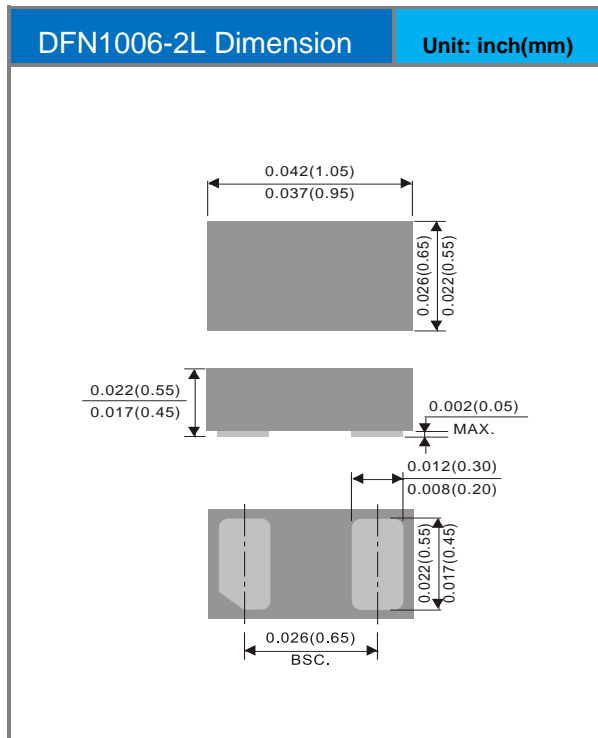


# PJE24VM5FN2

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking	Version
PJE24VM5FN2	DFN1006-2L	10K pcs / 7" Reel	AM	Halogen free RoHS compliant

## Packaging Information & Mounting Pad Layout





## PJE24VM5FN2

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