



**THE DATASHEET OF  
PJSD12LCFN2\_R1\_00001**





# PJSD12LCFN2

## Bi-Directional ESD Protection Diode

**Voltage** 12 V

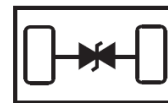
### Features

- 115W Power Dissipation (8/20us Waveform)
- Low Leakage Current, Maximum of 0.1uA@12Vdc
- Very Low Clamping Voltage
- IEC 61000-4-2(ESD) : ±30kV Air, ±30kV Contact Compliance
- 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
Peak Pulse Power (8/20us Waveform)	P <sub>PP</sub>	115	W
Peak Pulse Power (8/20us Waveform)	I <sub>PPM</sub>	5	A
ESD Voltage Per IEC61000-4-2 (Contact)	V <sub>ESD</sub>	±30	kV
ESD Voltage Per IEC61000-4-2 (Air)		±30	
ESD Voltage (HBM)		±8	
Operating Junction Temperature Range	T <sub>J</sub>	-55~150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~150	°C



# PJSD12LCFN2

## Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	12	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> = 1 mA	13	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 12 V	-	-	0.1	uA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> = 1 A, t <sub>P</sub> = 8/20us	-	-	20	V
		I <sub>PP</sub> = 5 A, t <sub>P</sub> = 8/20 us	-	-	23	V
Off State Junction Capacitance	C <sub>J</sub>	0 Vdc Bias f = 1 MHz	-	15	-	pF



# PJSD12LCFN2

## TYPICAL CHARACTERISTIC CURVES

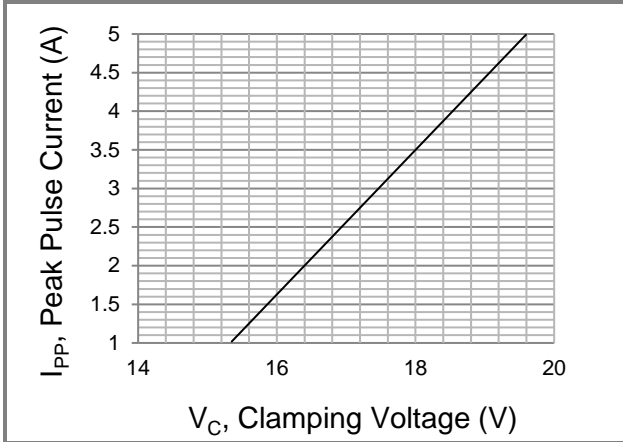


Fig.1 Typical peak clamping voltage(8/20us)

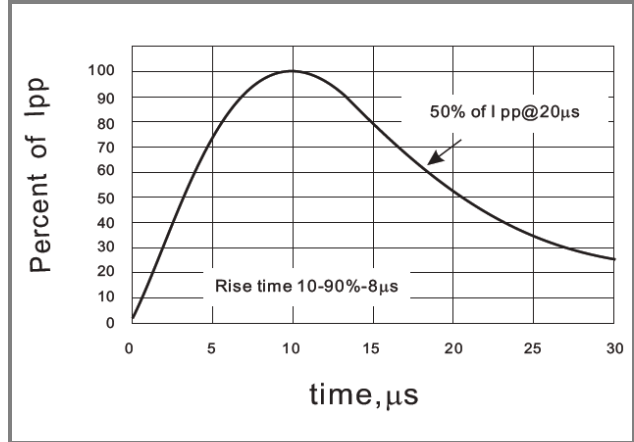


Fig.2 Pulse Waveform

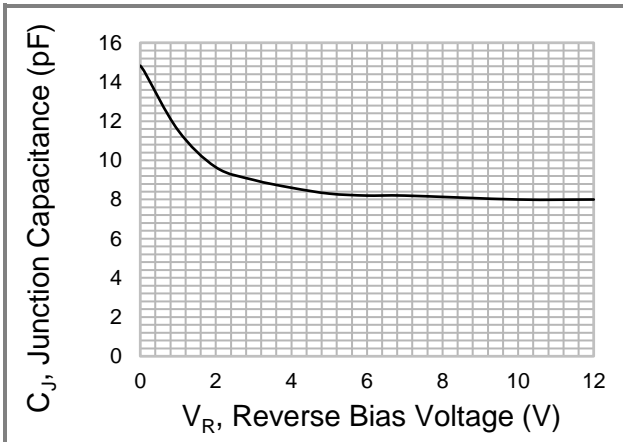


Fig.3 Typical Junction Capacitance

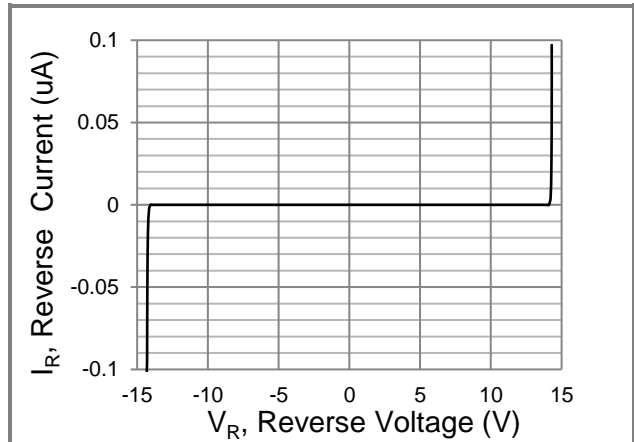


Fig.4 Typical Reverse Characteristics

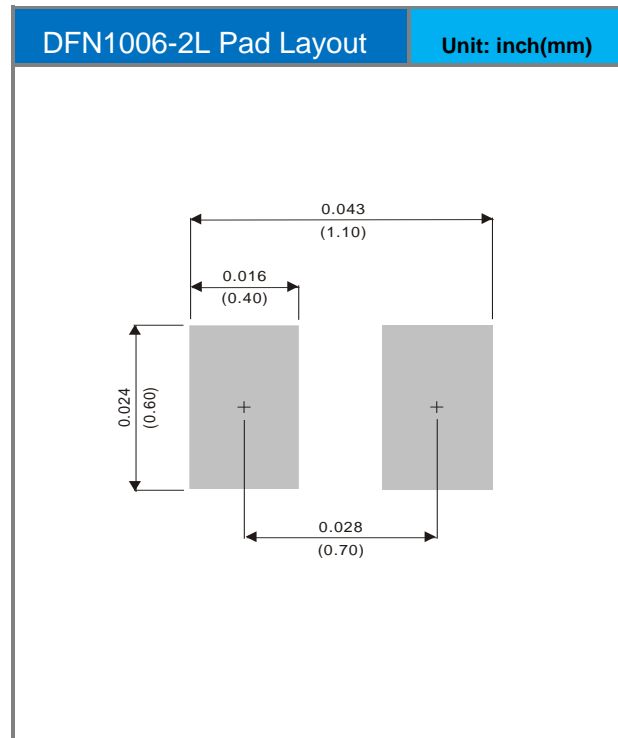
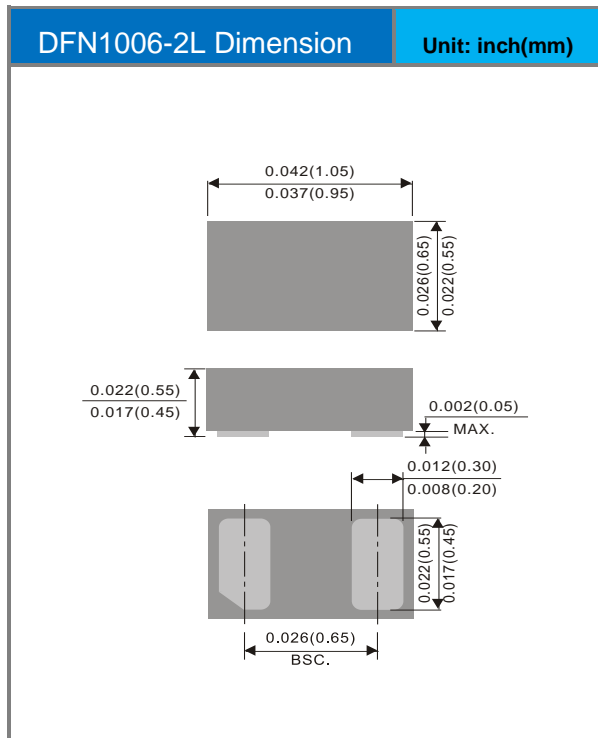


# PJSD12LCFN2

## Product and Packing Information

Part No.	Package Type	Packing Type	Marking	Version
PJSD12LCFN2	DFN1006-2L	10K pcs / 7" Reel	BX	Halogen free RoHS compliant

## Packaging Information & Mounting Pad Layout







## PJSD12LCFN2

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