



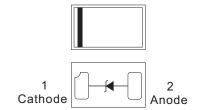
#### **ESD PROTECTION DIODES**

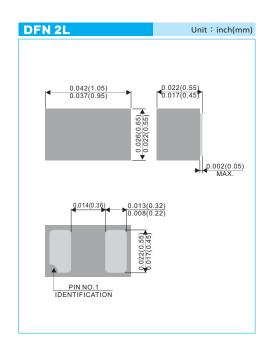
#### **FEATURES**

- IEC61000-4-2 Level 4 ESD Protection
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/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
- Weight: 0.00004 ounces, 0.0011grams
- · Polarity : see cathode band





#### **MAXIMUM RATINGS**

Rating	Symbol	Value	Units
Total Power Dissipation on FR-4 Board (Note 1)@Ta=25°C	P <sub>D</sub>	250	mW
Peak Power Dissipation 8/20 Surge Pulse	P <sub>PM</sub>	40	W
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Lead Solder Temperature-Maximum (10 Second Duration)	T <sub>L</sub>	260	°C
Operating Junction and Storage Temperature Range	$T_{J},T_{STG}$	-55 to +150	့

Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

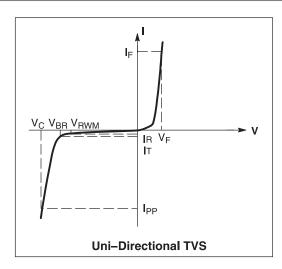
Note :  $1.FR-4 = 70 \times 60 \times 1mm$ .





### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise noted)

Parameter	Symbol	
Maximum Reverse Peak Pulse Current	I PP	
Clamping Voltage@I PP	Vc	
Working Peak Reverse Voltage	VRWM	
Maximum Reverse Leakage Current@Vrwm	IR	
Breakdown Voltage @ I ⊤	V <sub>BR</sub>	
Test Current	lτ	
Forward Current	lF	
Forward Voltage@I F	VF	
Maximum Peak Power Dissipation	РРМ	
Max.Capacitance@Vr=0 and f=1MHz	С	



### ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Part Number	V RWM	I R@VRWM	V BR@I T (Note 2)	C (Note 3)	Vc	<b>І</b> РР	lт	Marking
	Max.	Max.	Min.	Max.	Max Per 8/20μs			
	V	μΑ	V	pF	V	А	mA	
PJSD05LFN2	5	1	6.2	35	9.8	4	1.0	ВС

Note : 2.V  $_{BR}$  is measured with a pulse test current  $I\tau$  at an ambient temperature of 25  $^{\circ}C$ 

3.Capacitance at f=1MHz, VR=0V, TA=25°C





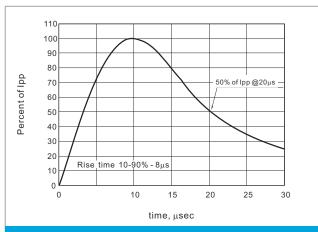


Fig. 18/20µs Peak Pulse Current Waveform

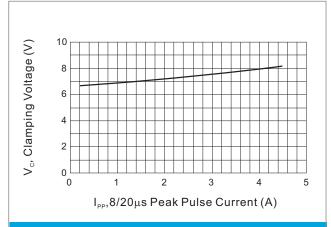


Fig.2 Typical Peak Clamping Voltage

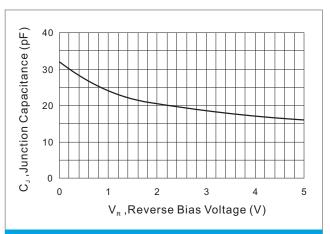


Fig.3 Typical Junction Capacitance

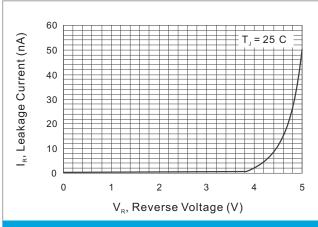


Fig.4 Typical Reverse Characteristics

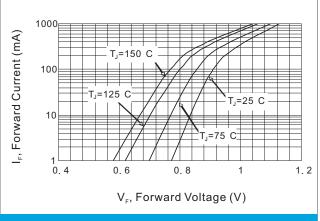


Fig.5 Typical Forward Characteristics

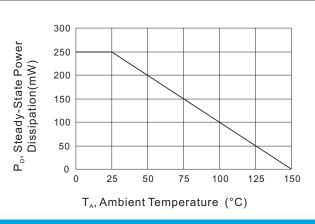
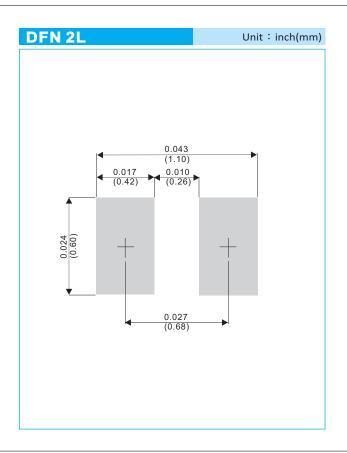


Fig.6 Power Derating Curve





#### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

· Packing information

T/R - 8K per 7" plastic Reel





### Part No\_packing code\_Version

PJSD05LFN2\_R1\_00001

### For example:



Packing Code XX				Versi	rsion Code XXXXX		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code	
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	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				





### **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.