



#### SINGLE LINE TVS DIODE FOR ESD PROTECTION PORTABLE ELECTRONICS

VOLTAGE 5 Volt POWER 200 Watt DFN 2L

#### **FEATURES**

- 200 Watts peak pules power( tp=8/20µs)
- Small package for use in portable electronics
- IEC61000-4-2 8KV contact 15KV Air compliant
- Low clamping voltage and leakage current
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### **APPLICATIONS**

· Case : DFN 2L plastic

• Terminals : Solderable per MIL-STD-750, Method 2026

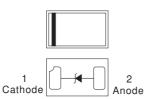
· Polarity: Color band cathode

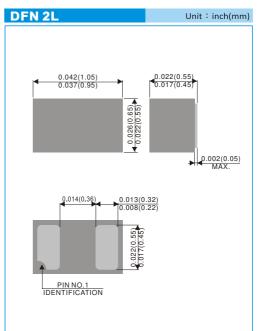
· Marking: BA

• Video I/O ports protection

• Set Top Boxes

Portable Instrumentation





#### **MAXIMUM RATINGS**

ABSOLUTE MAXIMUM RATING

Rating	Symbol	Value	Units
Peak Pulse Power (tp=8/20 μs)	P <sub>PP</sub>	200	W
Maximum Peak Pulse Current	I <sub>PPM</sub>	18	Α
ESD Voltage per HBM MIL-STD-883	V <sub>ESD</sub>	25	KV
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-50 to +150	°C

### **ELECTRICAL CHARACTERISTICS**

Parameter	Symbol	Conditions	Min.	Typical	Max.	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>BR</sub> =1mA	6.0	-	7.2	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	1	μA
Clamping Voltage(8/20µs)	V <sub>c</sub>	I <sub>pp</sub> =5A	-	-	11	V
Clamping Voltage(8/20µs)	V <sub>c</sub>	I <sub>PP</sub> =15A	-	-	14	V
Off State Junction Capacitance	C <sub>J</sub>	0Vdc Bias=f=1MHz	-	-	160	pF
Off State Junction Capacitance	CJ	5Vdc Bias=f=1MHz	-	-	80	pF

May 12,2017-REV.03 PAGE . 1





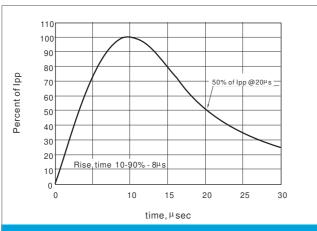


Fig. 1 8/20µs Peak Pulse Current Waveform

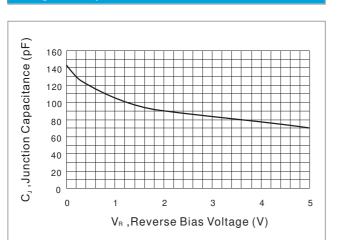
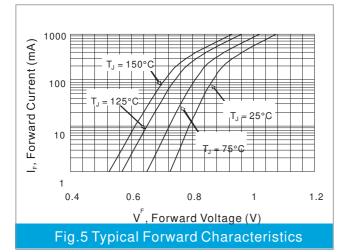


Fig.3 Typical Junction Capacitance



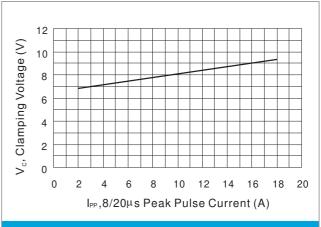


Fig.2 Typical Peak Clamping Voltage

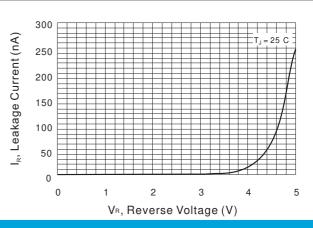


Fig.4 Typical Reverse Characteristics

May 12,2017-REV.03 PAGE . 2

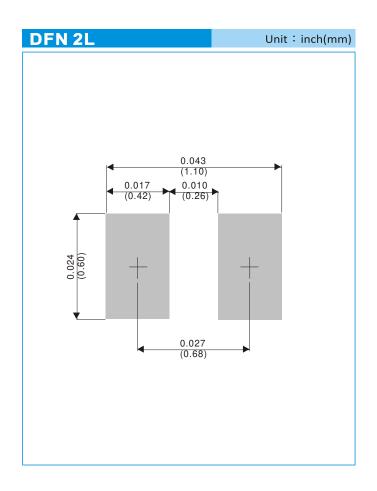




## **Part No Packing Code Version**

Part No Packing Code	Package Type	Packing Type	Marking	Version
PJ S D05FN2_R1_00001	DFN 2L	8K pcs / 7" reel	ВА	Halogen free

## **MOUNTING PAD LAYOUT**



May 12,2017-REV.03 Page 3





## **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.

May 12,2017-REV.03 PAGE . 4