



### SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 30 Volt CURRENT 0.2 Ampere

### **FEATURES**

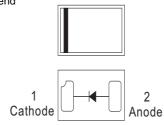
- · Low turn-on voltage
- · Fast switching
- PN junction guard ring for transient and ESD protection
- Lead free in compliance with EU RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

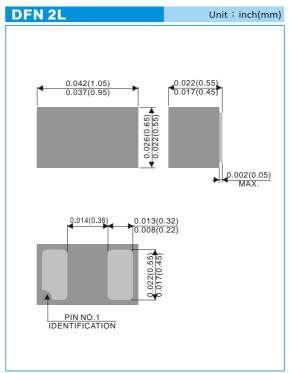
### **MECHANICAL DATA**

- · Case: DFN 2L, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026

• Polarity: Color band denotes cathode end

Marking: BN





#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

Parameter	Symbol	Value	Units
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	30	V
Maximum Average Forward Current at T <sub>A</sub> =75°C	I <sub>F(AV)</sub>	0.2	А
Peak Forward Surge Current, 1s	I <sub>FSM</sub>	0.6	А
Maximum Instantaneous Forward Voltage @ I <sub>F</sub> =1mA @ I <sub>F</sub> =100mA	V <sub>F</sub>	0.32 0.6	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $@V_R = 25V$	I <sub>R</sub>	2	μΑ
Junction Capacitance at V <sub>R</sub> =1V	C	25	pF
Thermal Resistance, Junction to Ambient	$R_{_{\theta JA}}$	400	°C/ W
Operating Junction and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +125	°C

May 12,2017-REV.07 PAGE . 1





#### **TYPICAL CHARACTERISTIC CURVES**

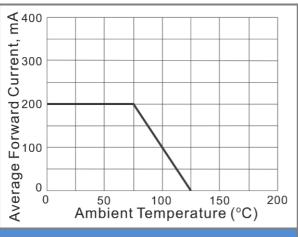


Fig.1 Forward Current Derating Curve

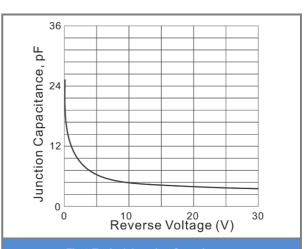


Fig.2 Typical Junction Capacitance

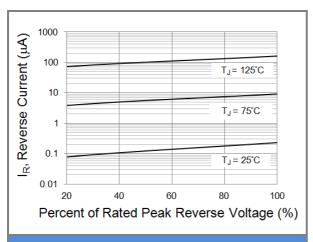
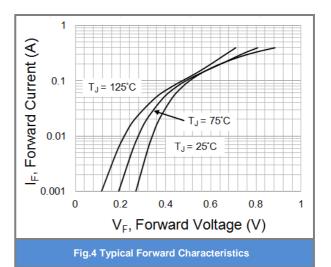
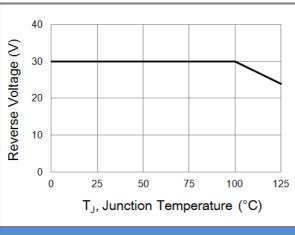


Fig.3 Typical Reverse Characteristics





**Fig.5 Operating Temperature Derating Curve** 

May 12,2017-REV.07 PAGE . 2

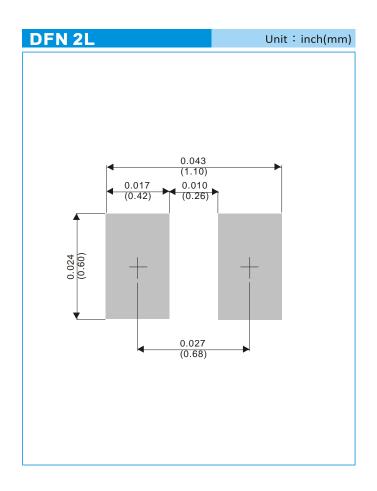




## **Part No Packing Code Version**

Part No Packing Code	Package Type	Packing Type	Marking	Version
BAT54FN2_R1_00001	DFN 2L	8K pcs / 7" reel	BN	Halogen free

## **MOUNTING PAD LAYOUT**



May 12,2017-REV.01 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.07 PAGE . 4