



#### SURFACE MOUNT SWITCHING DIODES

VOLTAGE 100Volts POWER 250mWatts

#### **FEATURES**

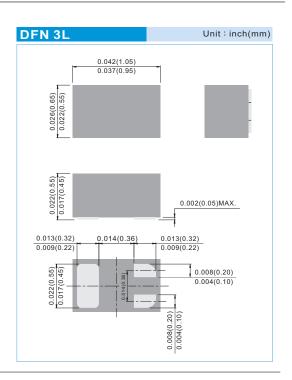
- · Fast switching speed.
- · Surface mount package Ideally Suited for Automatic insertion
- · Electrically Identical to Standard JEDEC
- · High Conductance
- · Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### **MECHANICAL DATA**

Case: DFN 3L, Plastic

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

3 2 2



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	BAW56FN3	UNITS
Marking Code		AJ	
Reverse Voltage	VR	70	V
Peak Reverse Voltage	VRM	75	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and f >=50 Hz  Single Diod Double Diode	e lo	150 75	mA
Peak Forward Surge Current,1.0us	IFSM	4.0	А
Power Dissipation Derate Above 25°C	Po	250	mW
Maximum Forward Voltage	VF	0.8 @ IF=1mA 1.0 @ IF=10mA 1.2 @ IF=50mA 1.8 @ IF=150mA	V
Maximum DC Reverse Current at 25V 75V	IR	1.0 2.5	μА
Maximum Junction Capacitance( Notes 1)	Сı	1.5	pF
Maximum Reverse Recovery Time (Notes 2)	Trr	4.0	ns
Typical Maximum Thermal Resistance	RθJA	500	°C / W
Junction Temperature Range	TJ	-55 to +150	°C

#### NOTE:

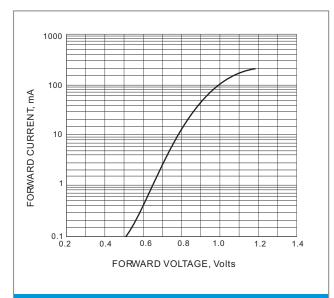
- 1. CJ at V<sub>R</sub>=0, f=1MHZ
- 2.From IF=10mA to IR=1mA, VR=6Volts, RL=100 $\Omega$

PAN JIT RESERVES THE RIGHT TO IMPROVE PRODUCT DESIGN, FUNCTIONS AND RELIABILITY WITHOUT NOTICE

REV.0.4-AUG.17.2009 PAGE . 1



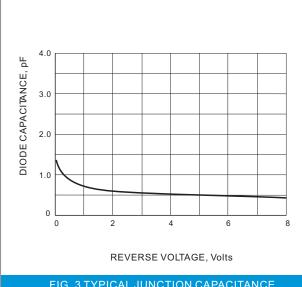




10 T<sub>J</sub>=125°C REVERSE CURRENT, u A 1.0 Tj=75°C 0.1 0.01 TJ=25°C 0.001 20 40 60 80 100 REVERSE VOLTAGE, Volts

FIG. 1-TYPICAL FORWARD CHARACTERISTIC





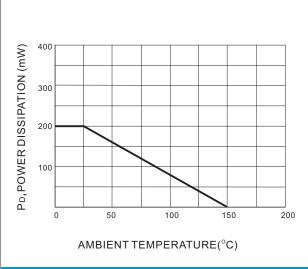


FIG. 3 TYPICAL JUNCTION CAPACITANCE

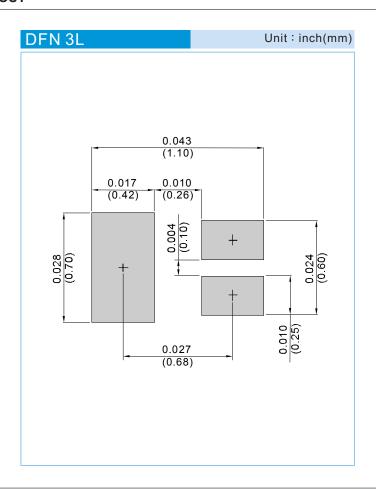
FIG. 4 POWER DERATING CURVE

REV.0.4-AUG.17.2009 PAGE . 2





#### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

· Packing information

T/R - 8K per 7" plastic Reel





### Part No\_packing code\_Version

BAW56FN3\_R1\_00001

### For example:



Packing Code XX			Version 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			

REV.0.4-AUG.17.2009 PAGE .4





### 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.