



### SMALL SURFACE MOUNT FAST DIODES

Voltage

800~1000 V

Current

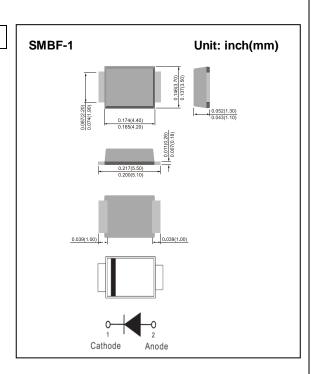
3 A

#### **Features**

- For surface mounted applications in order to optimize board space
- Ultra thin profile package for space constrained utilization
- Easy pick and place package suitable for automated handling
- Package suitable for automated handling
- Ideal for automated placement
- Glass passivated chip junction
- High temperature soldering : 260°C / 10 seconds at terminals
- 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: Molded plastic, SMBF-1
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- Approx. Weight: 0.0018 ounces, 0.05 grams



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

PARAMETER		SYMBOL	FRB3KF-LE	FRB3MF-LE	UNIT
Marking			LFB3KF	LFB3MF	
Maximum repetitive peak reverse voltage		Vrrm	800	1000	<b>V</b>
Maximum rms voltage		VRMS	560	700	٧
Maximum dc blocking voltage		VR	800	1000	V
Maximum average forward current		IF(AV)	3		Α
Peak forward surge current: 8.3ms single half sine- wave superimposed on rated load		IFSM	100		А
Maximum forward voltage at 3A		VF	1.3		V
Maximum dc reverse current at rated dc blocking voltage		lr	5		μΑ
Typical junction capacitance  Measured at 1MHz and applied V <sub>R</sub> =4V		Cı	30		pF
Maximum reverse recovery time (Note 1)		Trr	500		ns
Typical Thermal Resistance	(Note 2)	$R_{\theta JA}$	10	35	°C/W
	(Note 3)	$R_{ heta JC}$	1	5	
Operating and storage temperature range		TJ, TSTG	-55 to	+150	°C

Note:1.Reverse Recovery Test Conditions: IF=0.5A, IR=-1A, IRR=-0.25A

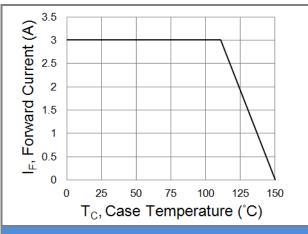
- 2. Mounted on a FR4 PCB, single-sided copper, mini pad.
- 3. Mounted on a FR4 PCB, single-sided copper, with 100cm2 copper pad area

December 22,2016 S122-REV.01





#### **TYPICAL CHARACTERISTIC CURVES**



**Fig.1 Forward Current Derating Curve** 

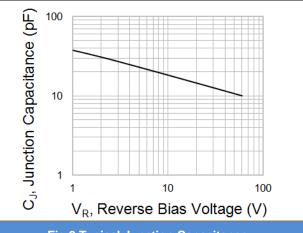


Fig.2 Typical Junction Capacitance

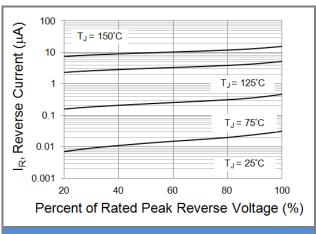
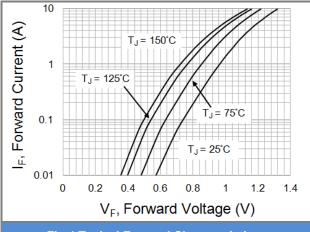


Fig.3 Typical Reverse Characteristics

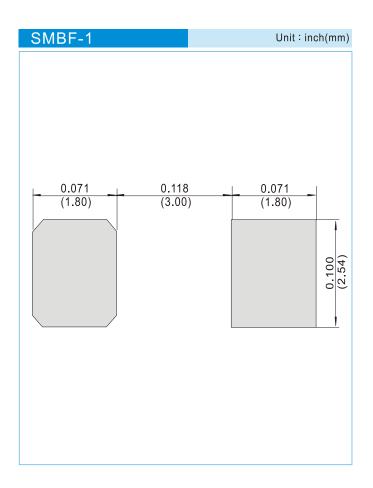


**Fig.4 Typical Forward Characteristics** 





### **Mounting Pad Layout**







#### 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.

# 单击下面可查看定价,库存,交付和生命周期等信息

>>Panjit(强茂)