



MB18F SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 80-200 Volt **CURRENT** 1 Ampere

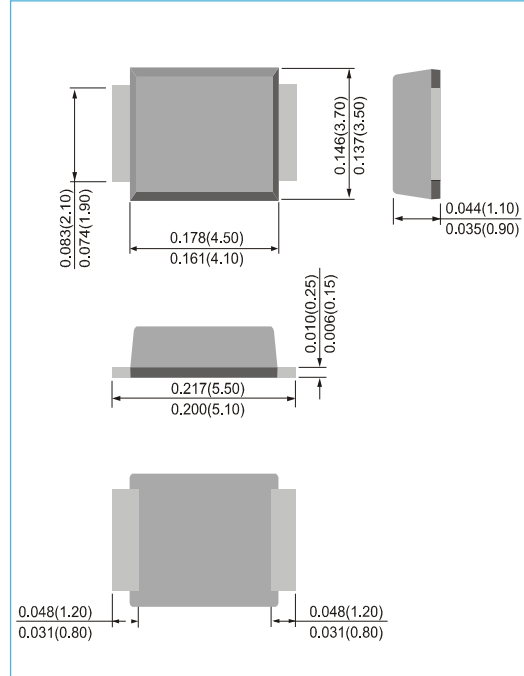
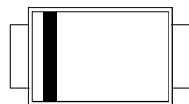
SMBF Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Low power loss,high efficiency
- High surge capacity
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: Epoxy molded
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams
- Polarity : Color band denotes cathode end



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	MB18F	MB19F	MB110F	MB115F	MB120F	UNITS
Recurrent Peak Reverse Voltage	V _{RRM}	80	90	100	150	200	V
RMS Voltage	V _{RMS}	56	63	70	105	140	V
DC Blocking Voltage	V _R	80	90	100	150	200	V
Average Forward Current	I _{F(AV)}	1					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30					A
Forward Voltage at 1.0A	V _F	0.8			0.9		V
DC Reverse Current at Rated DC Blocking Voltage	I _R	50					μA
Typical Junction capacitance	C _J	50			40	30	pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	R _{θJL} R _{θJA}	30 135					°C / W
Operating Junction Temperature and Storage Temperature Range	T _J , T _{STG}	-55 to +150					°C

NOTES :

- 1.Mounted on an FR4 PCB, single-sided copper, with 100cm²copper pad area.
- 2.Mounted on an FR4 PCB, single-sided copper, mini pad.



MB18F SERIES

RATING AND CHARACTERISTIC CURVES

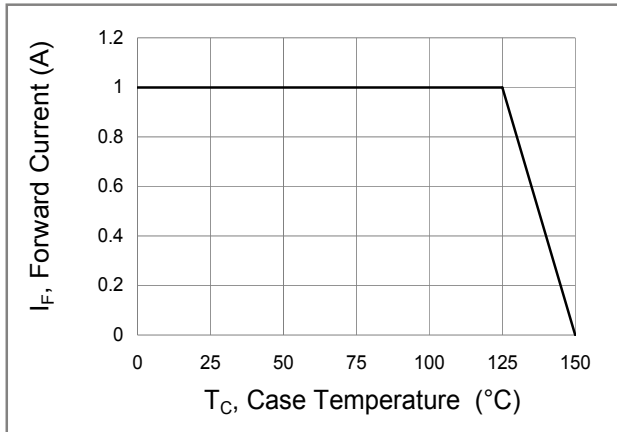


Fig.1 Forward Current Derating Curve

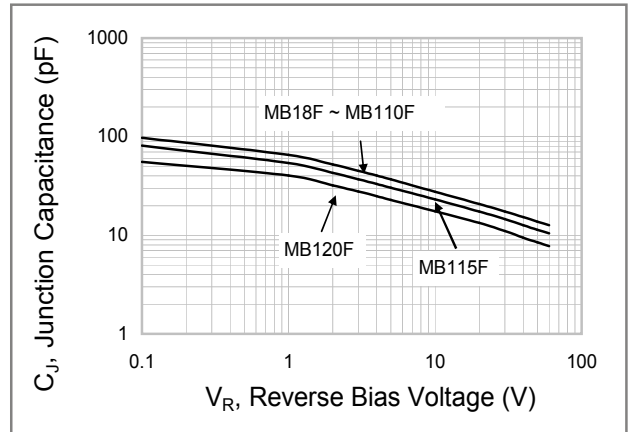


Fig.2 Typical Junction Capacitance

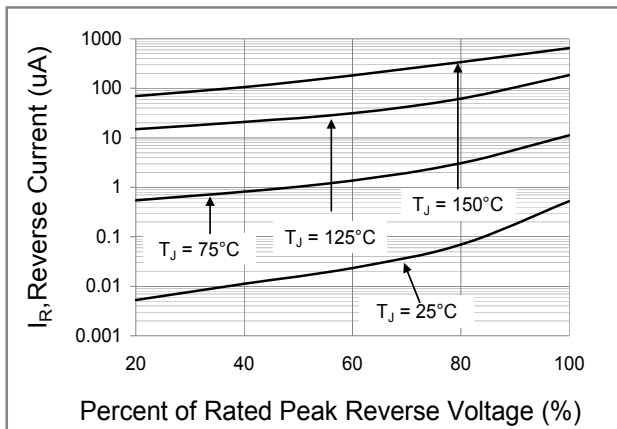


Fig.3 Typical Reverse Characteristics

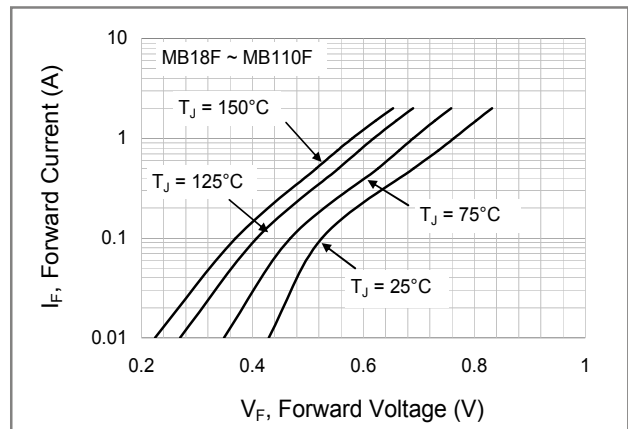


Fig.4 Typical Forward Characteristics

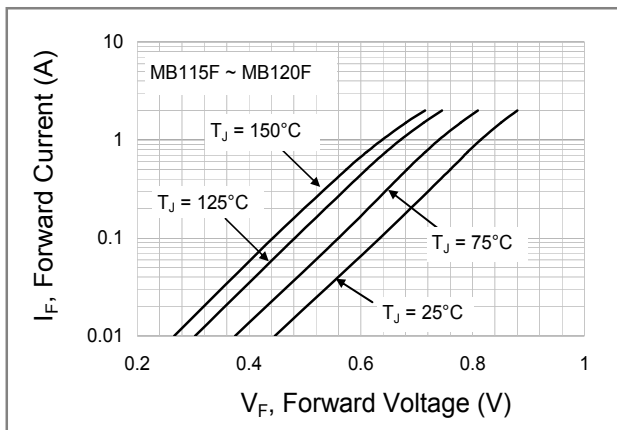


Fig.5 Typical Forward Characteristics

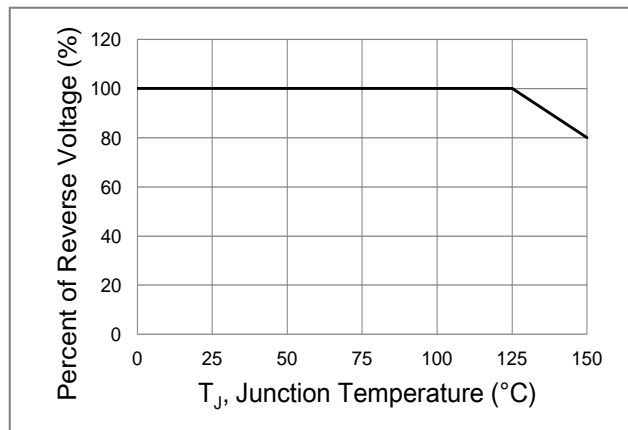
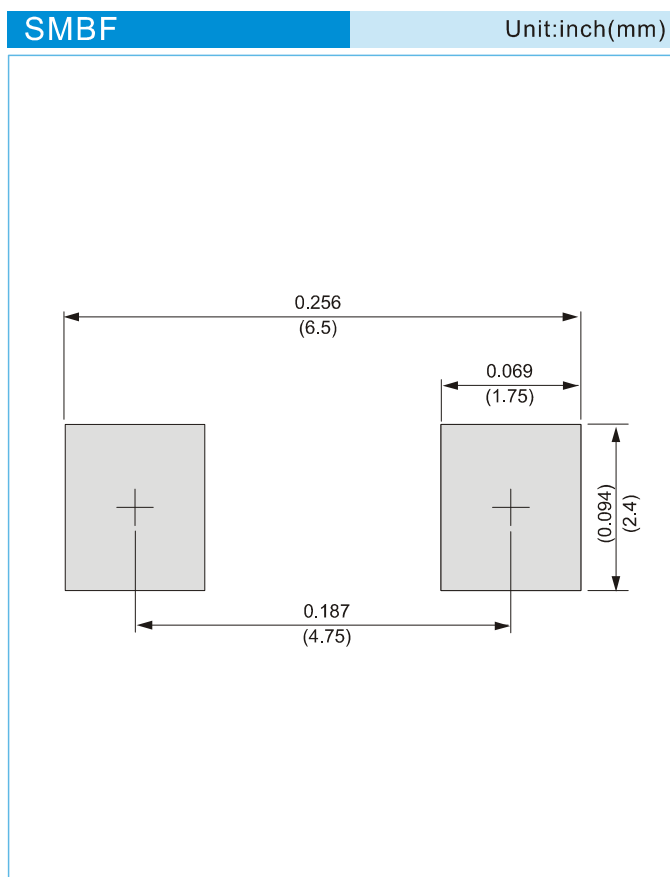


Fig.6 Operating Temperature Derating Curve



MB18F SERIES

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 5K per 13" plastic Reel



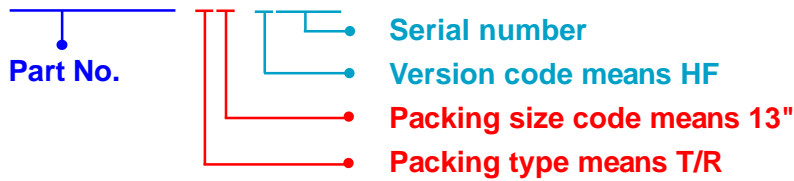
MB18F SERIES

Part No_packing code_Version

MB18F_R2_00001

For example :

RB500V-40_R2_00001



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



MB18F SERIES

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.