



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

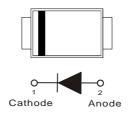
VOLTAGE 80-200 Volt CURRENT 1 Ampere SMBI

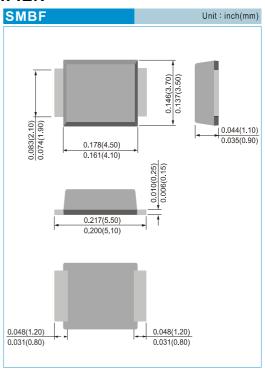
FEATURES

- 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 (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	MB18F	MB19F	MB110F	MB115F	MB120F	UNITS
Recurrent Peak Reverse Voltage		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				А	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	30					А
Forward Voltage at 1.0A	V _F	0.8 0.9			.9	V	
DC Reverse Current at Rated T _J =25°C	I _R	50				μА	
Typical Junction capacitance VR=4V,1MHz	C¹	50		40	30	pF	
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	R _{eJL} R _{eJA}	30 135				°C / W	
Operating Junction Temperature and Storage Temperature Range	T _J ,T _{STG}	-55 to +150				°C	

NOTES:

- ${\rm 1.Mounted\ on\ an\ FR4\ PCB,\ single-sided\ copper,\ with\ 100cm^2copper\ pad\ area.}$
- 2. Mounted on an FR4 PCB, single-sided copper, mini pad.





RATING AND CHARACTERISTIC CURVES

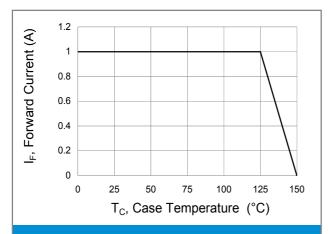


Fig.1 Forward Current Derating Curve

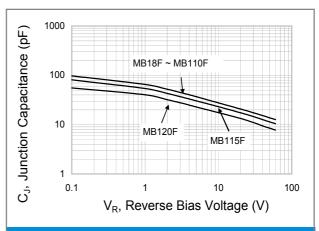


Fig.2 Typical Junction Capacitance

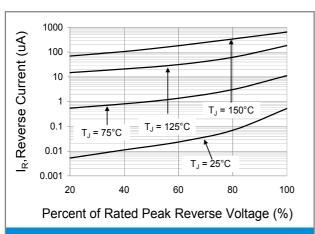


Fig.3 Typical Reverse Characteristics

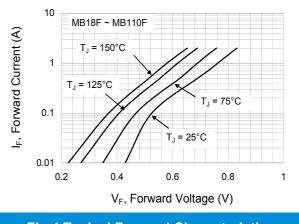


Fig.4 Typical Forward Characteristics

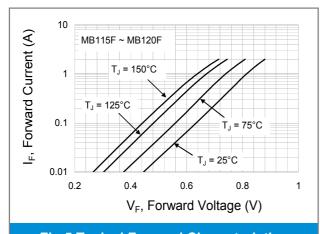


Fig.5 Typical Forward Characteristics

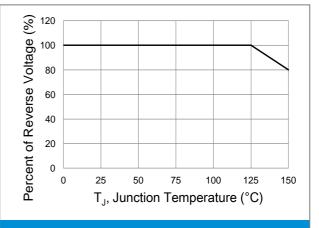
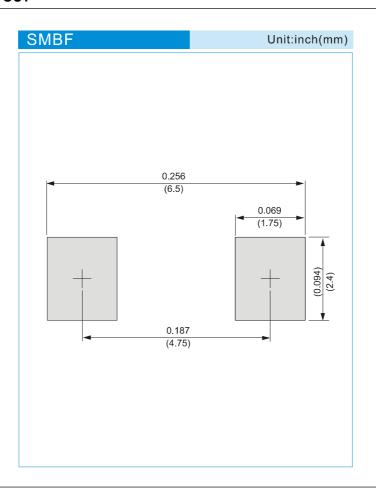


Fig.6 Operating Temperature Derating Curve





MOUNTING PAD LAYOUT



ORDER INFORMATION

• Packing information

T/R - 5K per 13" plastic Reel





Part No_packing code_Version

MB18F_R2_00001

For example:



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)	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	х						
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						





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