



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

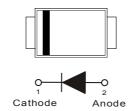
VOLTAGE 80-200 Volts CURRENT 1 Amperes SMBF

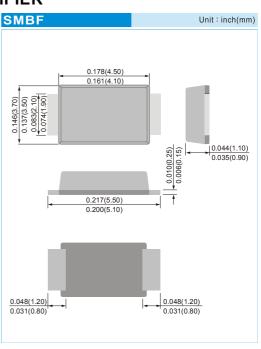
FEATURES

- 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
- · Metal to silicon rectifier. majority carrier conduction
- · Low power loss, high efficiency
- · High surge capacity
- Lead free in comply with EU RoHS 2011/65/EU directives.
- 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	<u> </u>	SYMBOL	MB18F	MB19F	MB110F	MB115F	MB120F	UNITS
Recurrent Peak Reverse Voltage		V _{RRM}	80	90	100	150	200	V
RMS Voltage			56	63	70	105	140	V
DC Blocking Voltage		V _R	80	90	100	150	200	V
Average Forward Current		I _{F(AV)}	1					Α
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)		I _{FSM}	30					Α
Forward Voltage at 1.0A		V _F	0.8 0.9			.9	٧	
DC Reverse Current at Rated DC Blocking Voltage T _J =25°C		I _R	50				μА	
Typical Junction capacitance	V _R =4V,1MHz	CJ		50		40	30	pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)		$R_{\theta JL} R_{\theta JA}$	30 135				°C / W	
Operating Junction Temperature and Storage Temperature Range		T_J, T_{STG}	-55 to +150					°C

NOTES:

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





RATING AND CHARACTERISTIC CURVES

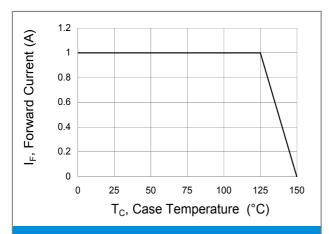


Fig.1 Forward Current Derating Curve

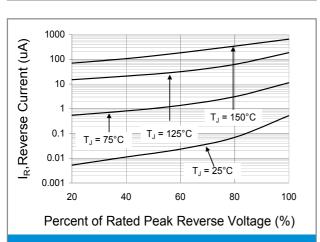


Fig.3 Typical Reverse Characteristics

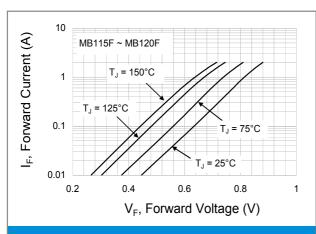


Fig.5 Typical Forward Characteristics

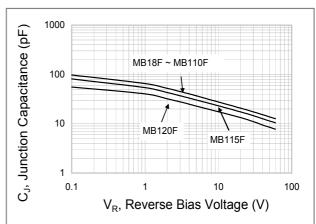


Fig.2 Typical Junction Capacitance

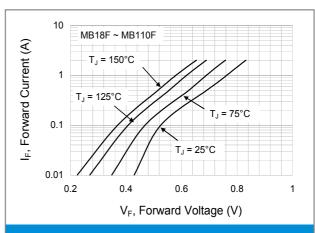
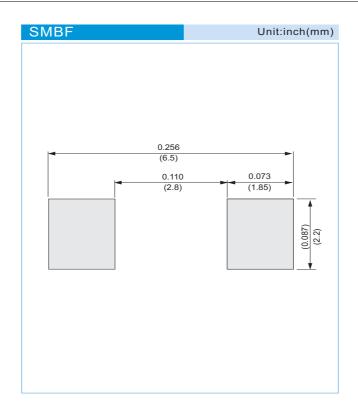


Fig.4 Typical Forward Characteristics





MOUNTING PAD LAYOUT



ORDER INFORMATION

Packing information

T/R - 5K per 13" plastic Reel

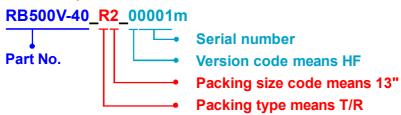




Part No_packing code_Version

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	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						





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