



MB18F SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 80-200 Volts **CURRENT** 1 Amperes

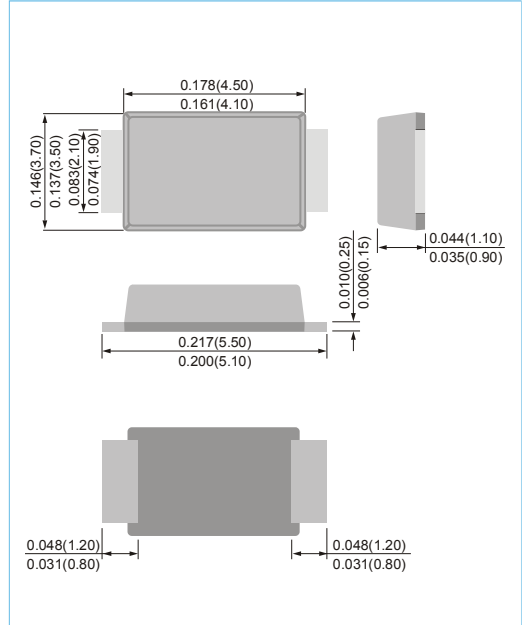
SMBF Unit : inch(mm)

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
- 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 (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(JEDEC method)	I _{FSM}	30					A
Forward Voltage at 1.0A	V _F	0.8		0.9		V	
DC Reverse Current at Rated DC Blocking Voltage T _J =25°C	I _R	50					μA
Typical Junction capacitance V _R =4V,1MHz	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.



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RATING AND CHARACTERISTIC CURVES

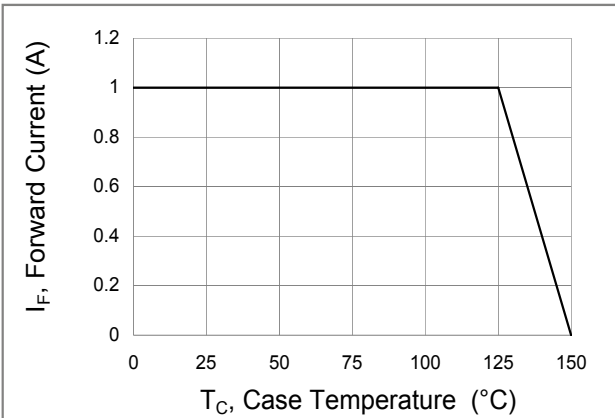


Fig.1 Forward Current Derating Curve

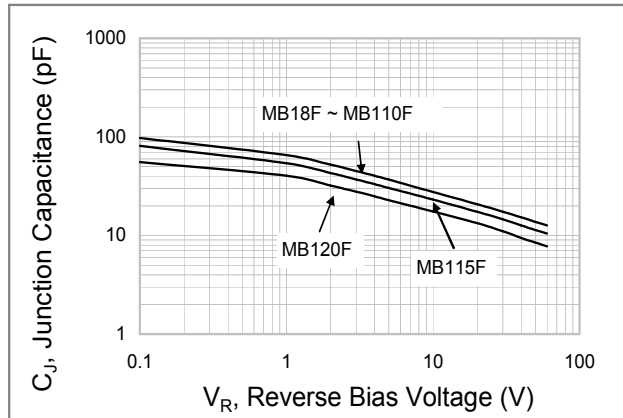


Fig.2 Typical Junction Capacitance

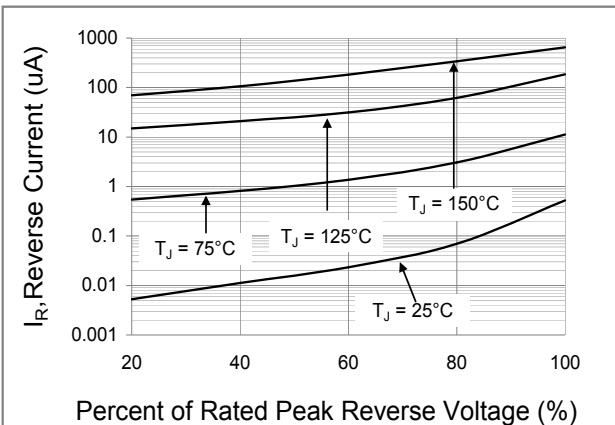


Fig.3 Typical Reverse Characteristics

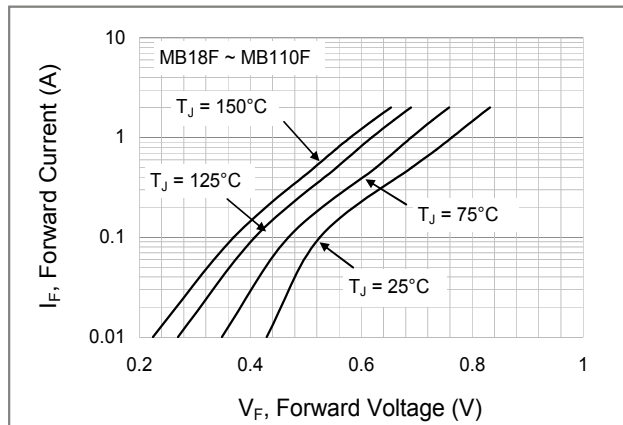


Fig.4 Typical Forward Characteristics

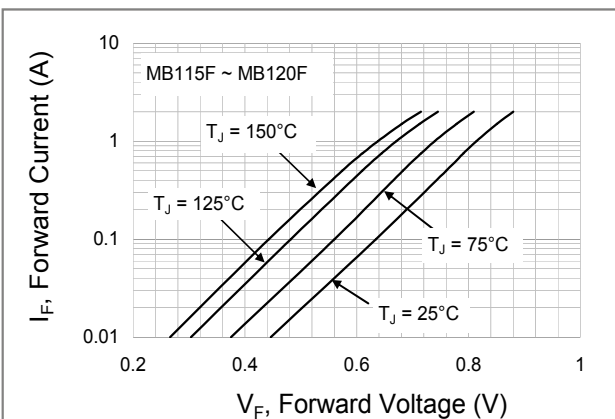
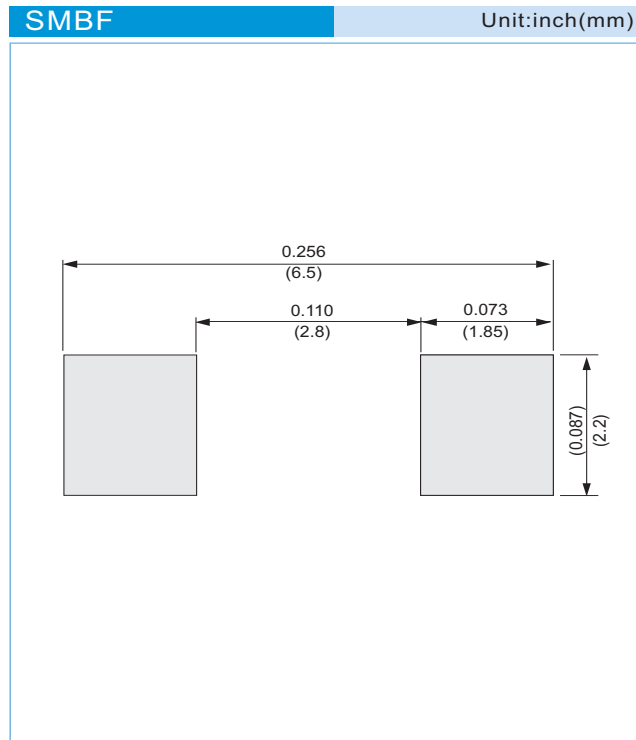


Fig.5 Typical Forward Characteristics



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MOUNTING PAD LAYOUT



ORDER INFORMATION

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



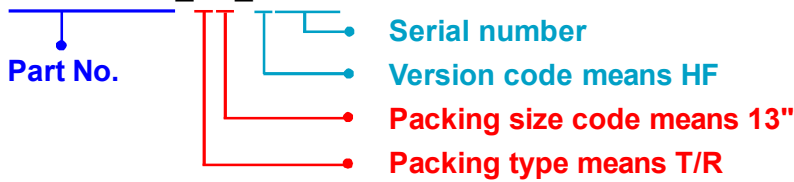
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Part No_packing code_Version

MB18F_R2_00001

For example :

RB500V-40 **R2** **00001m**



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			



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