



BR38F~BR320F

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

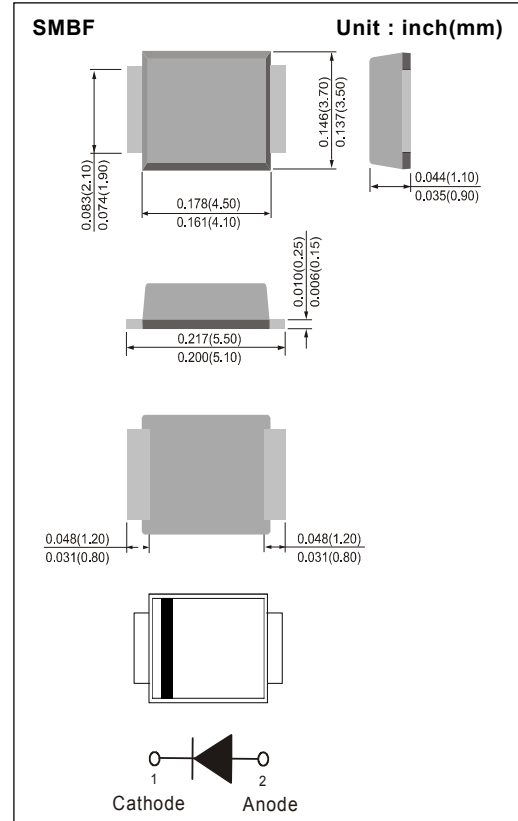
VOLTAGE 80-200Volt **CURRENT** 3 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- 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 RoHS2.0 (2011/65/EU & 2015/865/EU directive)
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

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



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

PARAMETER	SYMBOL	BR38F	BR39F	BR310F	BR315F	BR320F	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	$I_{F(AV)}$	3					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80					A
Forward Voltage at 3A	V_F	0.8			0.9		V
DC Reverse Current at Rated DC Blocking Voltage	I_R	0.05					mA
Typical Junction Capacitance ($V_R=4V, f=1MHz$)	C_J	120			100	70	pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	17 135					°C / W
Operating Junction Temperature and Storage Temperature Range	T_J, T_{STG}	-65 to +150					°C

NOTES :

1. Mounted on FR-4 PCB, single-sided copper, with 100cm² copper pad area.
2. Mounted on FR-4 PCB, single-sided copper, mini pad.



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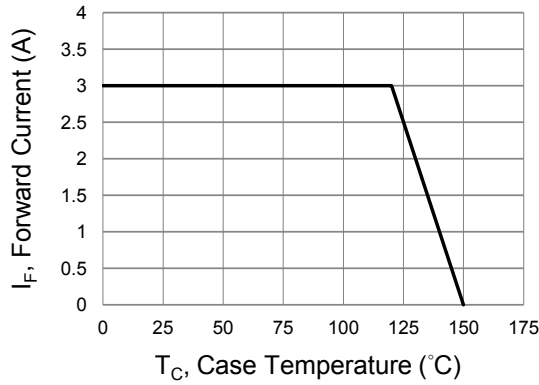


Fig.1 Forward Current Derating Curve

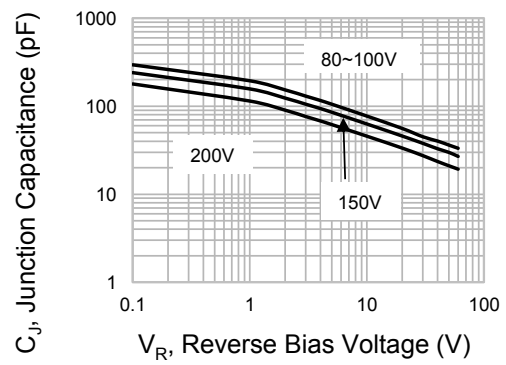


Fig.2 Typical Junction Capacitance

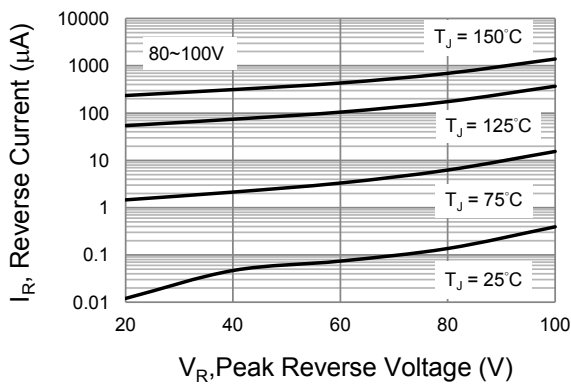


Fig.3 Typical Reverse Characteristics

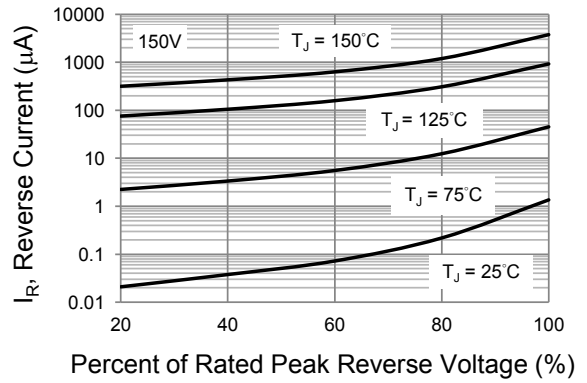


Fig.4 Typical Reverse Characteristics

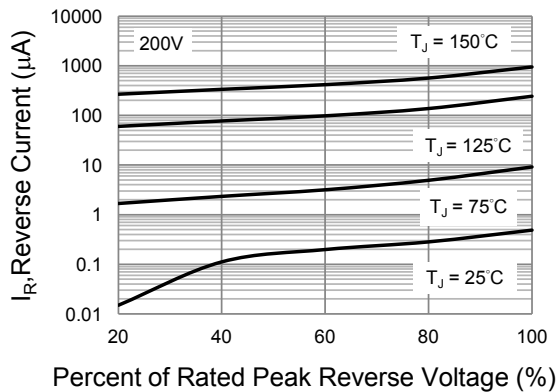


Fig.5 Typical Reverse Characteristics

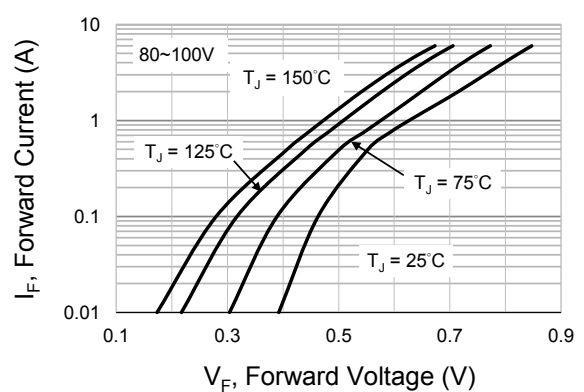


Fig.6 Typical Forward Characteristics



BR38F~BR320F

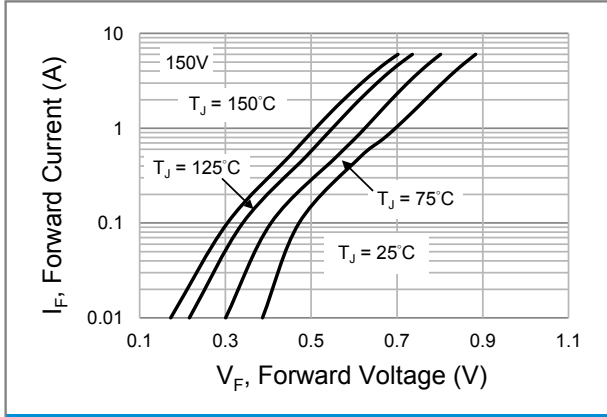


Fig.7 Typical Forward Characteristics

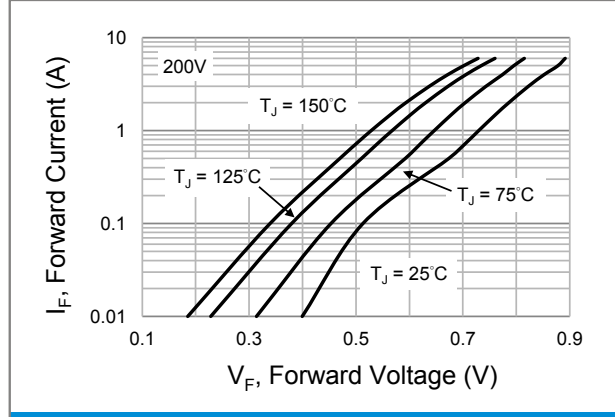


Fig.8 Typical Forward Characteristics

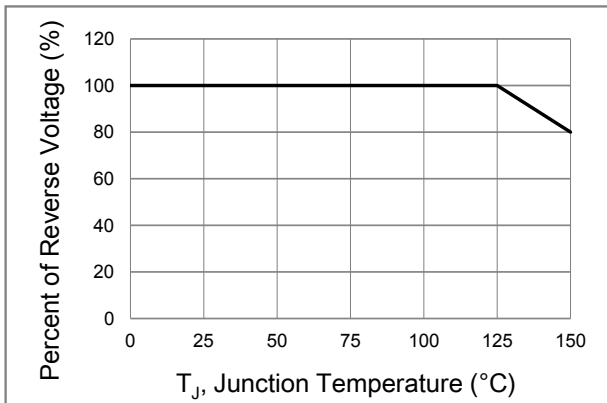


Fig.9 Operating Temperature Derating Curve

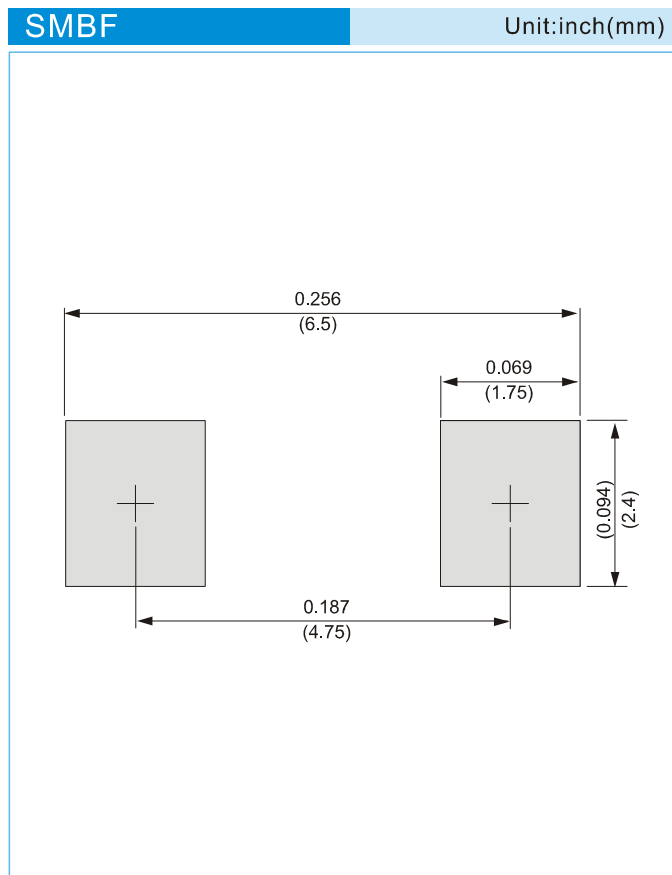


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PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
BR38F_R2_00001	SMBF	5K pcs / 13" reel	BR38F	Halogen free

MOUNTING PAD LAYOUT





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