



BR38F SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 80-200Volts **CURRENT** 3 Amperes

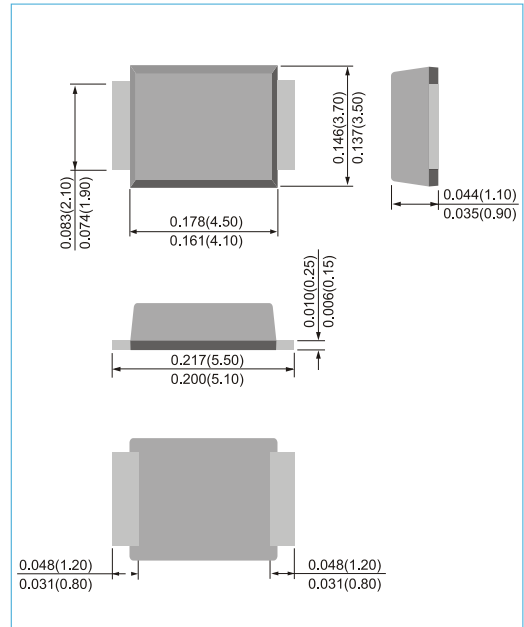
SMBF Unit : inch(mm)

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
- Built-in strain relief
- 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: 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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=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)}	3.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	80					A
Forward Voltage at 3.0A	V _F	0.8		0.9			V
DC Reverse Current at Rated DC Blocking Voltage	I _R	0.05					mA
Typical Junction capacitance (VR=4V, f=1MHz)	C _J	120		100	70	pF	
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	R _{θJL} R _{θJA}	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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RATING AND CHARACTERISTIC CURVES

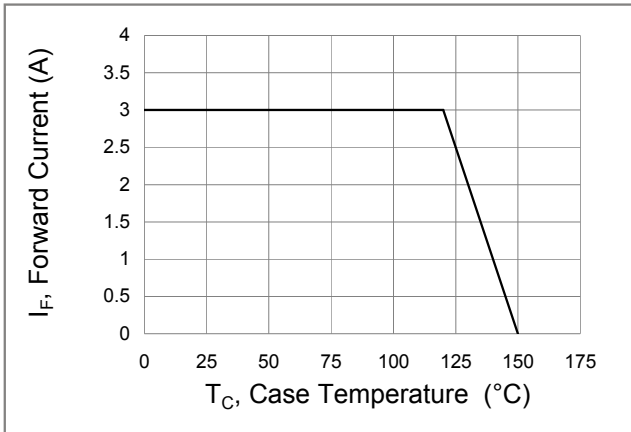


Fig.1 Forward Current Derating Curve

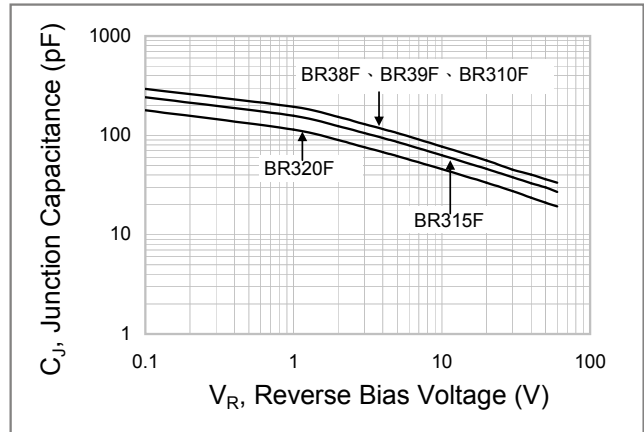


Fig.2 Typical Junction Capacitance

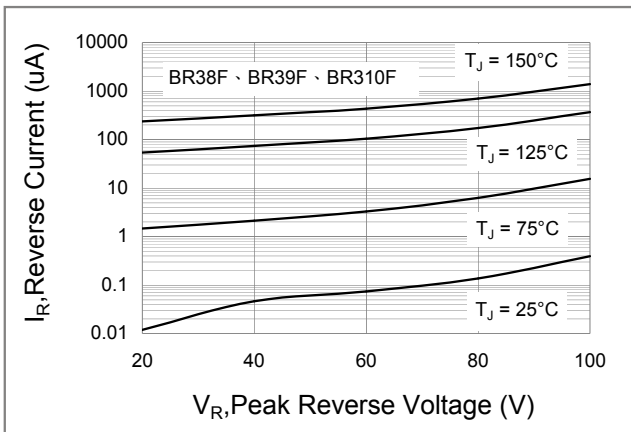


Fig.3 Typical Reverse Characteristics

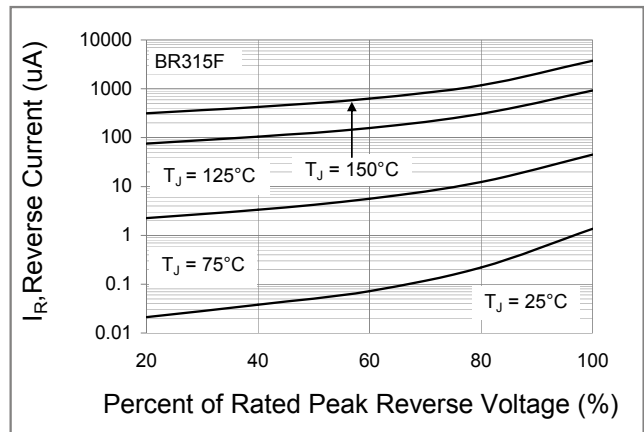


Fig.4 Typical Reverse Characteristics

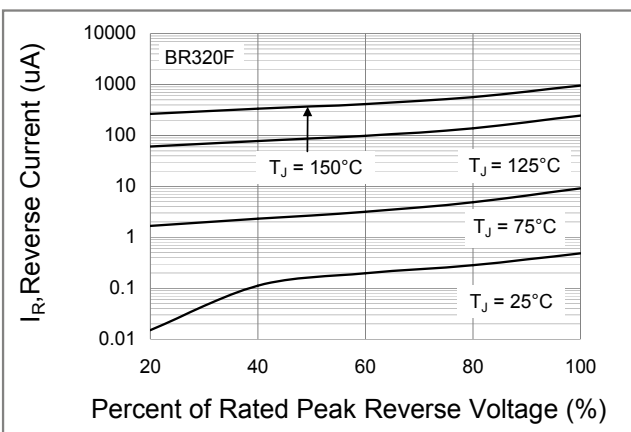


Fig.5 Typical Reverse Characteristics

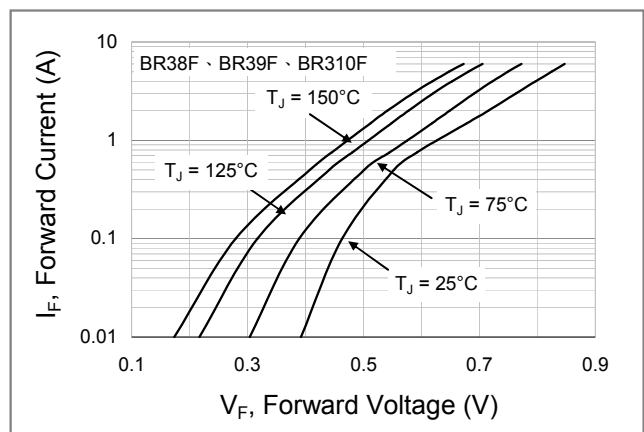


Fig.6 Typical Forward Characteristics



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RATING AND CHARACTERISTIC CURVES

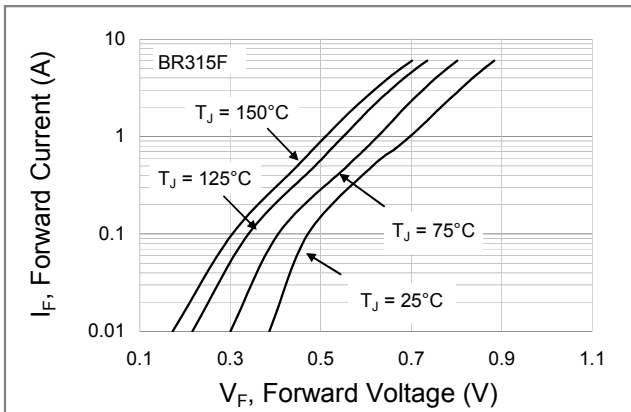


Fig.7 Typical Forward Characteristics

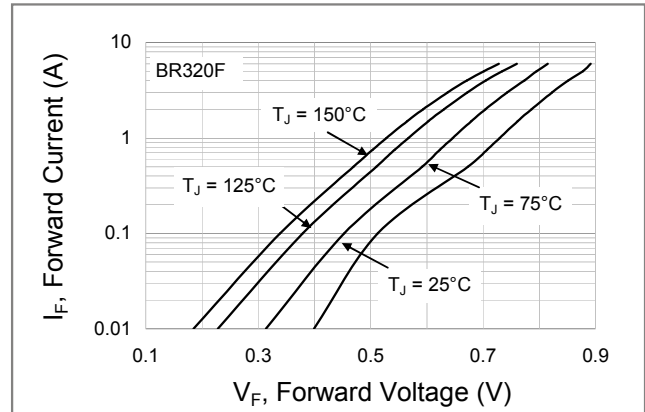
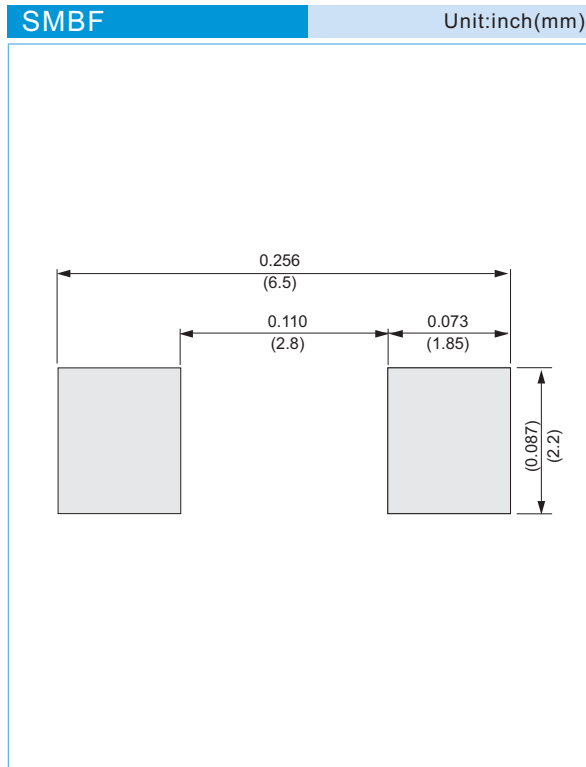


Fig.8 Typical Forward Characteristics



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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

BR38F_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
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			



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