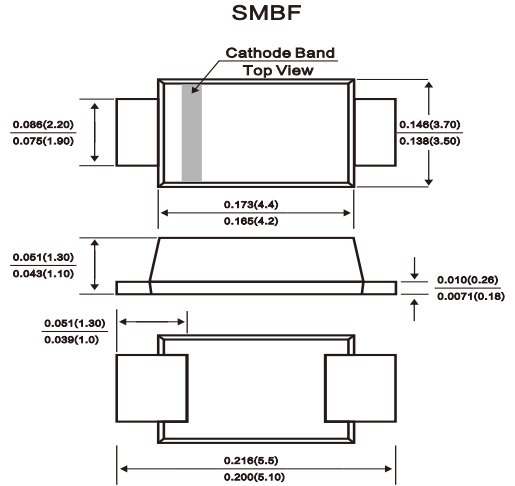


## FEATURES

- ◆ Metal silicon junction, majority carrier conduction
- ◆ For surface mounted applications
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ For use in low voltage, high frequency inverters, free-wheeling, and polarity protection applications

## MECHANICAL DATA

**Case:** JEDEC SMBF molded plastic body  
**Terminals:** leads solderable per MIL-STD-750, Method 2026  
**Mounting Position:** Any  
**Weight:** 57mg/0.002oz



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

MDD Catalog Number	SYMBOLS	SS32BF	SS34BF	SS36BF	SS38BF	SS310BF	SS315BF	SS320BF	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	40	60	80	100	150	200	VOLTS
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	105	140	VOLTS
Maximum DC blocking voltage	$V_{DC}$	20	40	60	80	100	150	200	VOLTS
Maximum average forward rectified current at $T_L$ (see fig.1)	$I_{(AV)}$	3.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	80.0			70.0				Amps
Maximum instantaneous forward voltage at 3.0A	$V_F$	0.55	0.70	0.85		0.95		Volts	
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	$I_R$	0.5 5.0			0.3 3.0				mA
Typical junction capacitance (NOTE 1)	$C_J$	450			400				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	50.0							$^\circ\text{C/W}$
Operating junction temperature range	$T_J$	-50 to +125							$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-50 to +150							$^\circ\text{C}$

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

Fig.1 Forward Current Derating Curve

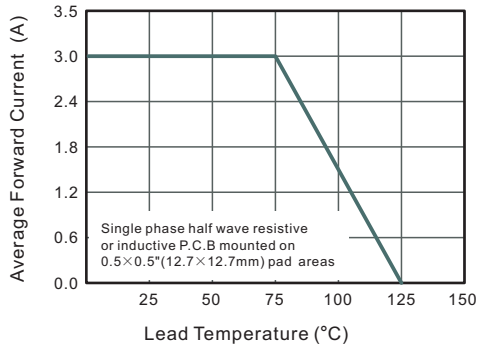


Fig.2 Typical Reverse Characteristics

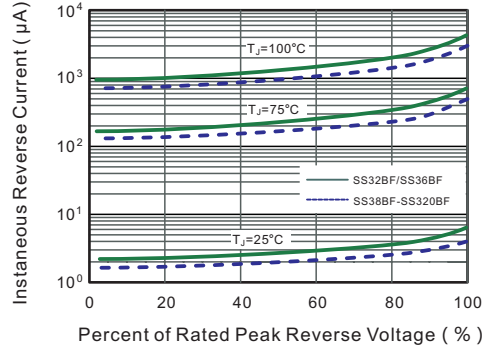


Fig.3 Typical Forward Characteristic

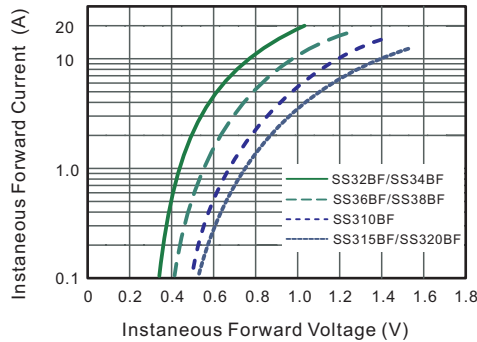


Fig.4 Typical Junction Capacitance

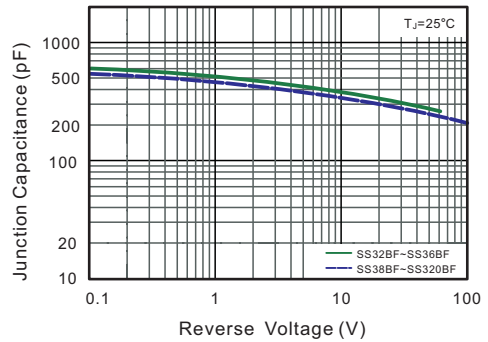


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

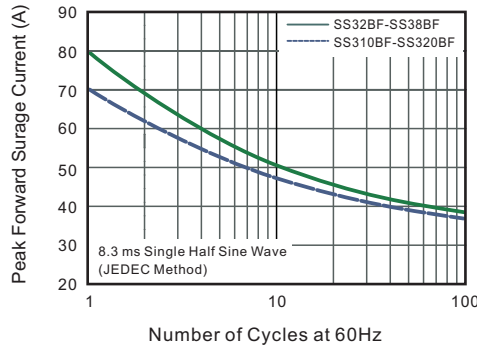
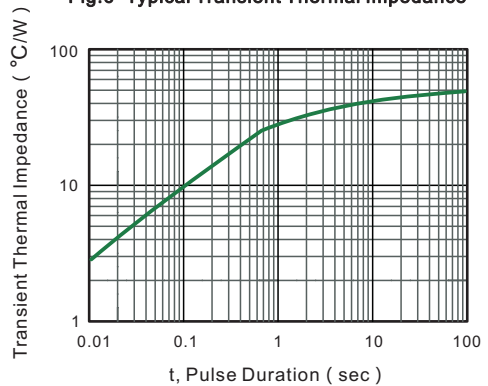


Fig.6- Typical Transient Thermal Impedance



**ORDERING INFORMATION**

Order Code	Package	Baseqty	Deliverymode
UMW SS32BF	SMBF	3000	Tape and reel
UMW SS34BF	SMBF	3000	Tape and reel
UMW SS36BF	SMBF	3000	Tape and reel
UMW SS38BF	SMBF	3000	Tape and reel
UMW SS310BF	SMBF	3000	Tape and reel
UMW SS315BF	SMBF	3000	Tape and reel
UMW SS320BF	SMBF	3000	Tape and reel