

## Features

- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed:  
260°C/10seconds
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking



**SMBF**

## Mechanical Data

- Case:SMBF Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free

## Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

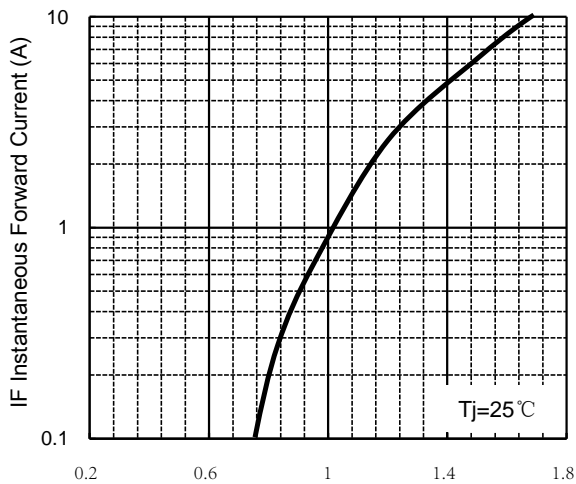
Parameter	Symbols	RS2ABF	RS2BBF	RS2DBF	RS2GBF	RS2JBF	RS2KBF	RS2MBF	Unit	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V	
Maximum average forward rectified current	$I_{F(AV)}$	2.0							A	
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	$I_{FSM}$	50							A	
@ $I_F=2.0A$ Maximum forward voltage	$V_F$	0.95		1.3		1.70		3.20		V
@ $V_{DC}$	$I_R$	5							$\mu A$	
Maximum reverse current		100								
$I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$ MAX. reverse recovery time	$T_{RR}$	150			250		500		ns	
Typical thermal resistance (Note 1)	$R_{\theta JA}$	100							°C/W	
$V_R=4.0V, f=1MHz$ Type junction capacitance	$C_J$	22							pF	
Operating junction temperature rang	$T_J$	-55 --- +150							°C	
Storage temperature rang	$T_{STG}$	-55 --- +150							°C	

Note:

1) Thermal resistance from junction to ambient, PCB mounted.

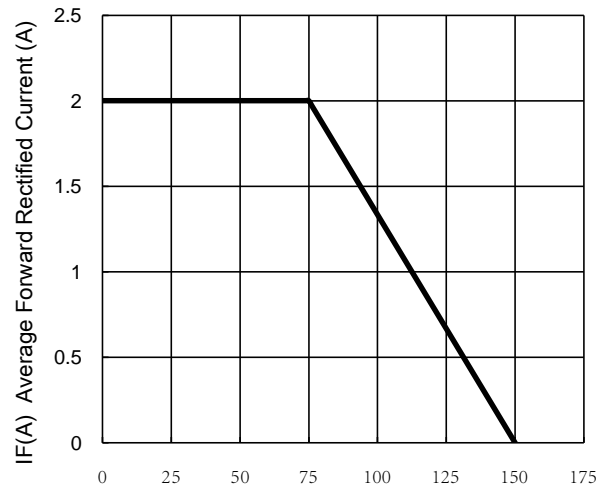
## Characteristic Curves

**TYPICAL FORWARD CHARACTERISTIC**



VF Instantaneous Forward Voltage (V)

**FORWARD CURRENT DERATING CURVE**



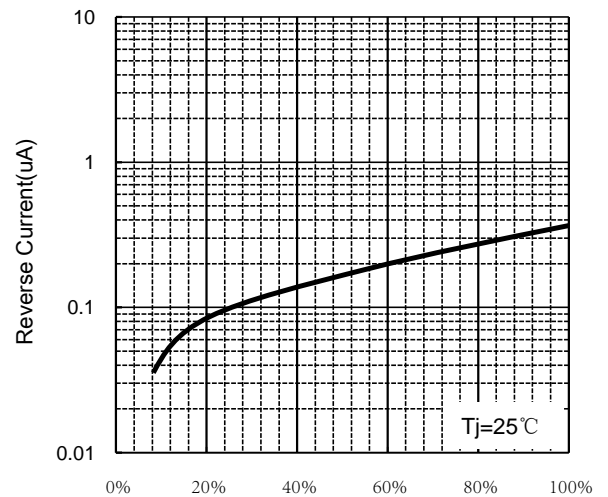
TL, Lead temperature (°C)

**MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT**



Number of Cycles at 60 Hz.

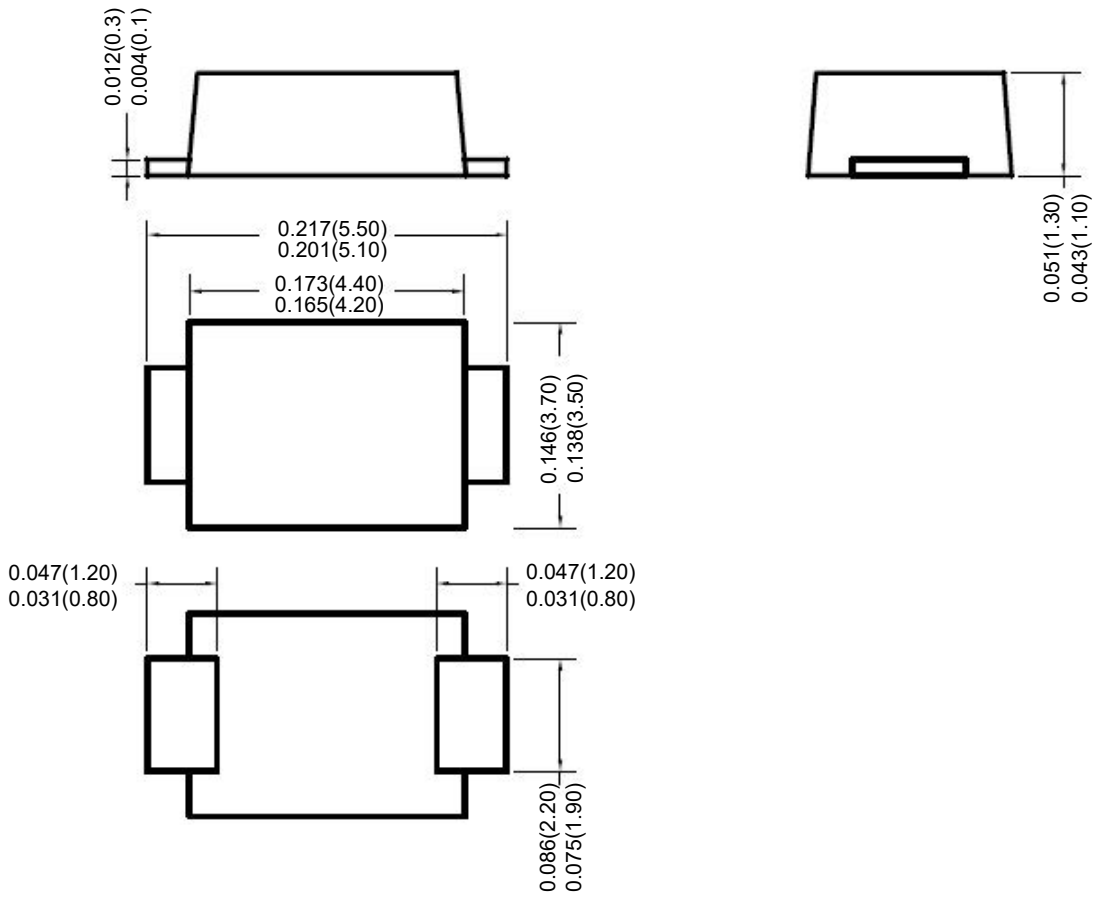
**Typical Reverse Characteristics**



Percent Of Rated Peak Reverse voltage %

**Package Outline**

**SMBF**



Unit: inch (mm)

**Package Information**

Qty: 3,000/Tape and reel