**SMBF Plastic-Encapsulate Diodes****S3ABF THRU S3MBF** General Purpose Rectifier Diodes**Features**

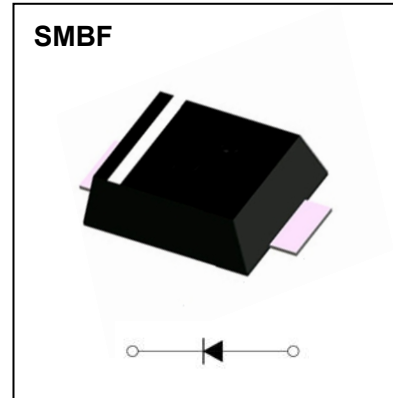
- $I_{F(AV)}$ 3A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- S3XBF
- X : From A To M

**Limiting Values(Absolute Maximum Rating)**

Item	Symbol	Unit	Test Conditions	S3						
				ABF	BBF	DBF	GBF	JBF	KBF	MBF
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	280	420	560	700
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_L = 100^\circ\text{C}$	3.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, $T_a = 25^\circ\text{C}$	100						
Junction Temperature	T_J	$^\circ\text{C}$		$-55 \sim +150$						
Storage Temperature	T_{STG}	$^\circ\text{C}$		$-55 \sim +150$						

Electrical Characteristics ($T = 25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	S3						
				ABF	BBF	DBF	GBF	JBF	KBF	MBF
Peak Forward Voltage	V_F	V	$I_F = 3.0\text{A}$	1.1						
Peak Reverse Current	I_{RRM1}	μA	$V_{RM} = V_{RRM}$	$T_a = 25^\circ\text{C}$						
	I_{RRM2}			$T_a = 125^\circ\text{C}$						
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient	85						
Typical junction capacitance per diode	C_J	pF	Measured at 1.0MHz and applied reverse voltage of 4.0 volts.	40						

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

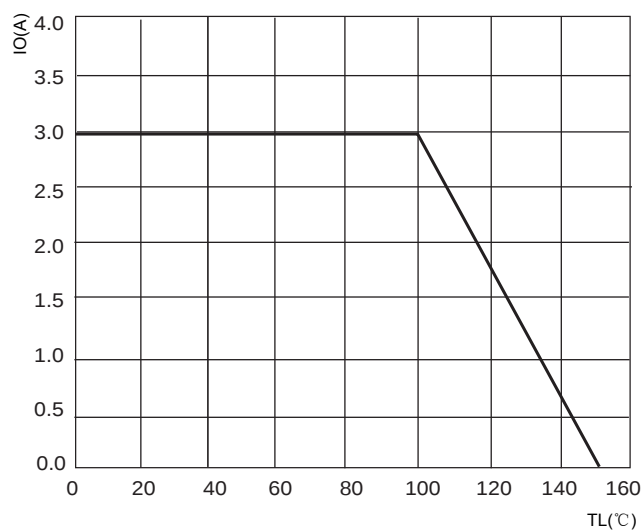


FIG2: Surge Forward Current Capability

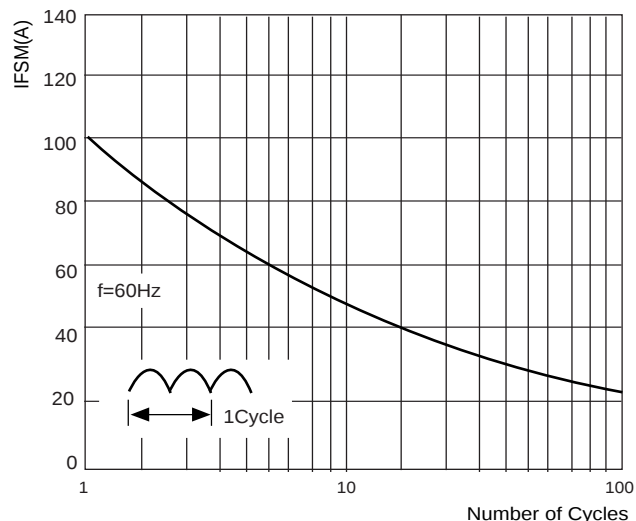


FIG.3: TYPICAL FORWARD CHARACTERISTICS

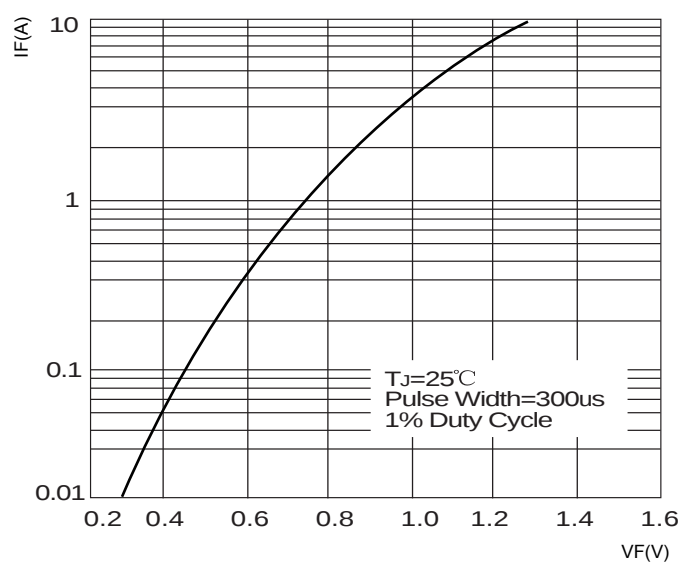
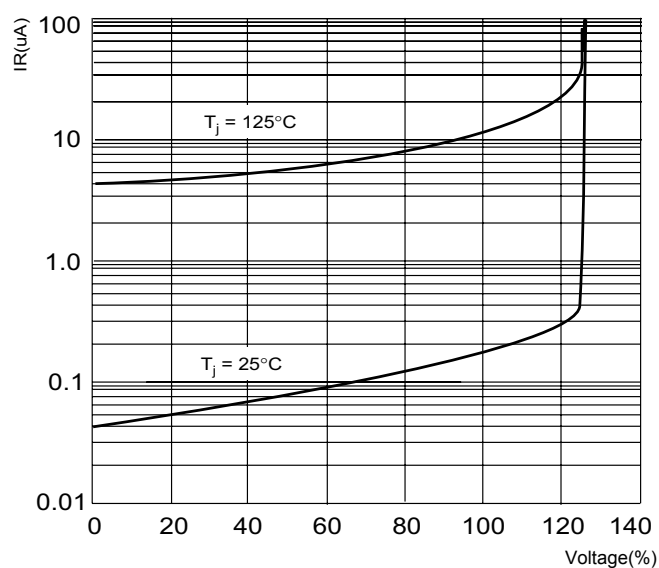
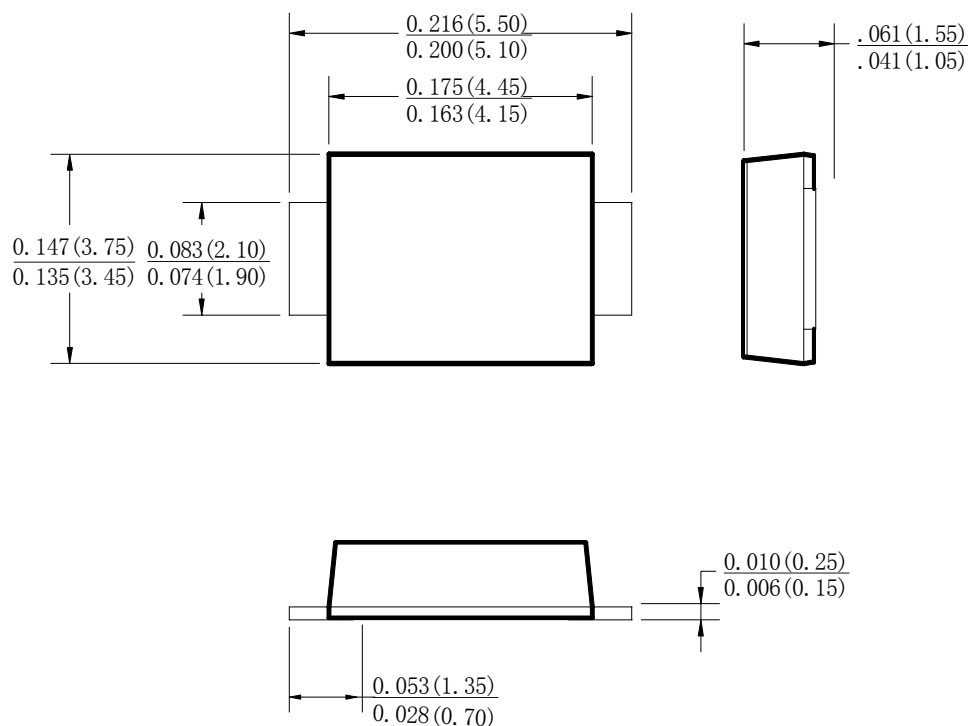


FIG.4 : TYPICAL REVERSE CHARACTERISTICS

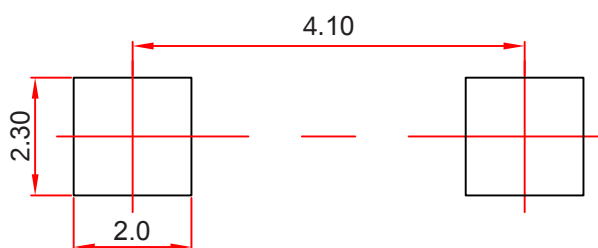


SMBF Package Outline Dimensions



Dimensions in inches and (millimeters)

SMBF Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ does not assume any liability arising out of the application or use of any product described herein.