

Features

- High efficiency operation
- Metal silicon junction,majority carrier conduction
- Ultra low forward voltage drop,low power losses
- High forward surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260°C
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Reverse Voltage
20-200 V
Forward Current
3 Ampere

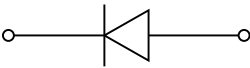
Applications

For use in low voltage high frequency inverters, free wheeling,DC/DC converters, and polarity protection applications.

Mechanical Data

- Case: SMBF
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Cathode line denotes the cathode end

SMBF



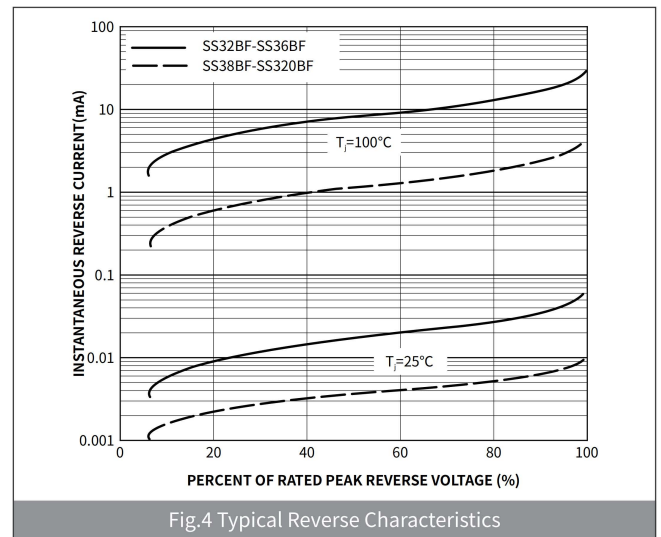
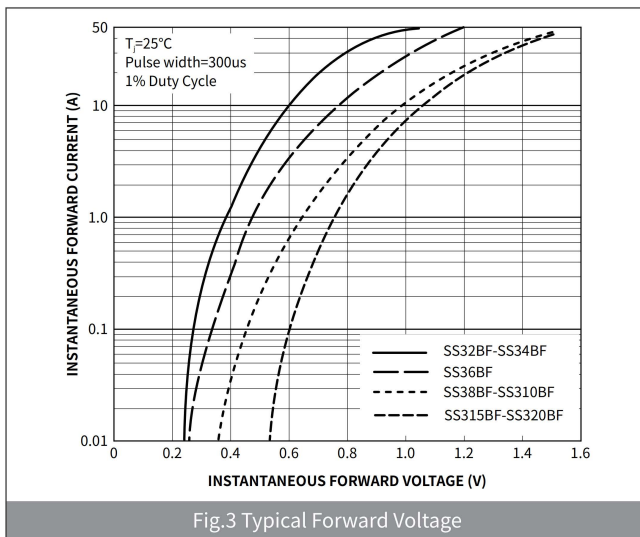
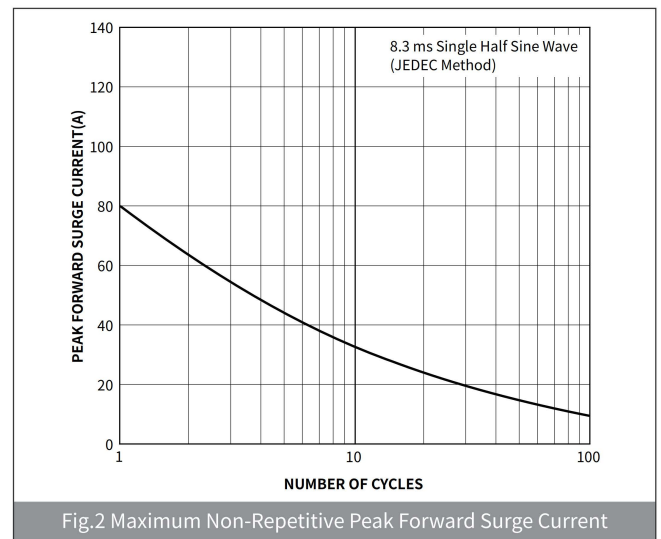
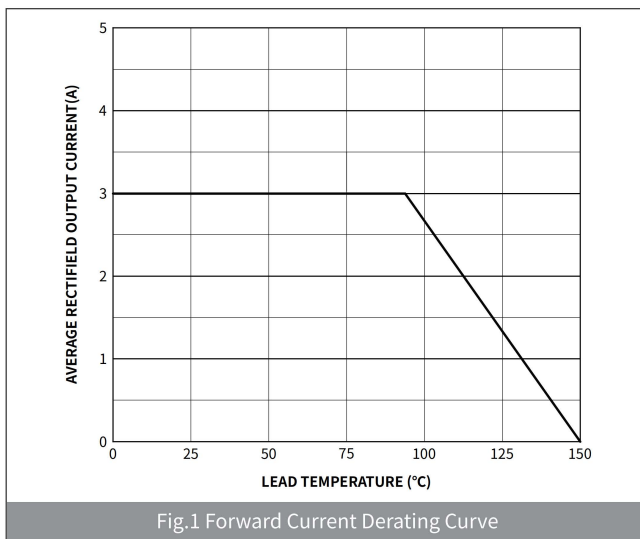
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS32BF	SS34BF	SS36BF	SS38BF	SS310BF	SS315BF	SS320BF
Device marking code			SS32BF	SS34BF	SS36BF	SS38BF	SS310BF	SS315BF	SS320BF
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	20	40	60	80	100	150	200
Maximum RMS Voltage	V_{RMS}	V	14	28	42	56	70	105	140
Maximum DC blocking Voltage	V_{DC}	V	20	40	60	80	100	150	200
Maximum Average Forward Rectified Current @60Hz sine wave, Resistance load,TL (Fig.1)	$I_{F(AV)}$	A	3.0						
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	A	80						
Storage temperature	T_{stg}	°C	-55 ~ +150						
Junction temperature	T_j	°C	-55 ~ +150						
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	78						
	$R_{\theta J-L}$	°C /W	20						

Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	SS32BF	SS34BF	SS36BF	SS38BF	SS310BF	SS315BF	SS320BF
Maximum instantaneous forward voltage	$I_F=3.0A$	V_F	V	0.55		0.70	0.85			0.95
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}$, $T_A=25^\circ C$	I_{R1}	mA	0.5				0.05		
	$V_R=V_{DC}$, $T_A=100^\circ C$	I_{R2}		50				10		
Typical junction capacitance	4.0V DC, 1MHz	C_J	pF	450				400		

Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SMBF	R2	0.065	3000	6000	48000	11"
SMBF	R3	0.065	5000	10000	80000	13"

Package Outline Dimensions (SMBF)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.90	2.10	0.074	0.083
B	4.15	4.45	0.163	0.175
C	3.40	3.80	0.133	0.150
D	5.10	5.60	0.200	0.220
E	1.05	1.55	0.041	0.061
F	0.70	1.35	0.027	0.053
G	0.15	0.25	0.006	0.010

Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
M	2.20	-	0.086	-
J	1.90	-	0.075	-
K	-	2.40	-	0.094