

## FEATURES

- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Built-in strain relief, ideal for automated placement
- Low power loss, high efficiency.
- High forward surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



SMBF



Cathode

## MECHANICAL DATA

- Case: SMBF Molded plastic
- Terminals: Pure tin plated, lead free
- Polarity: Indicated by cathode band
- Weight: 57mg (approx.)

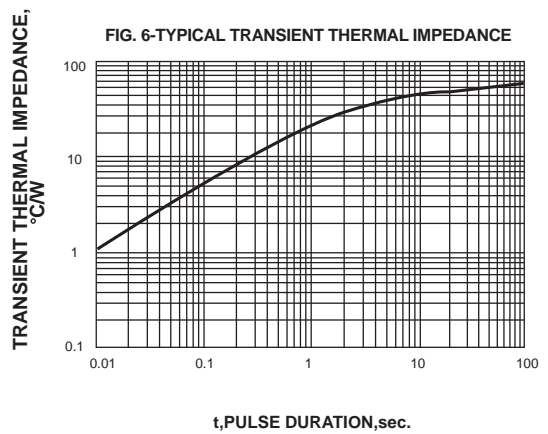
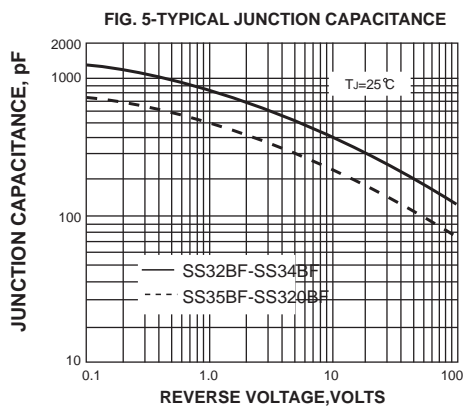
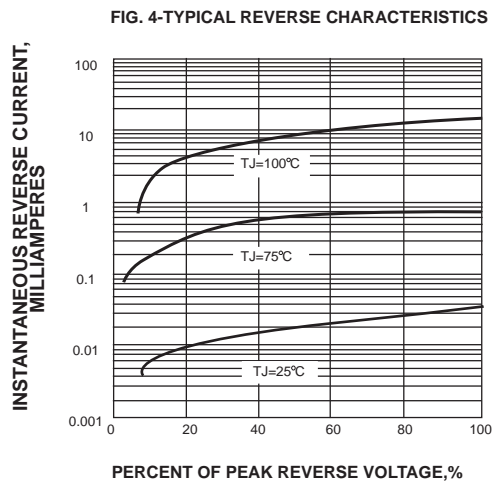
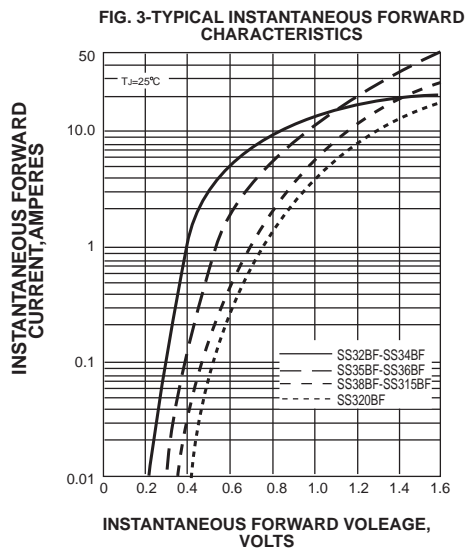
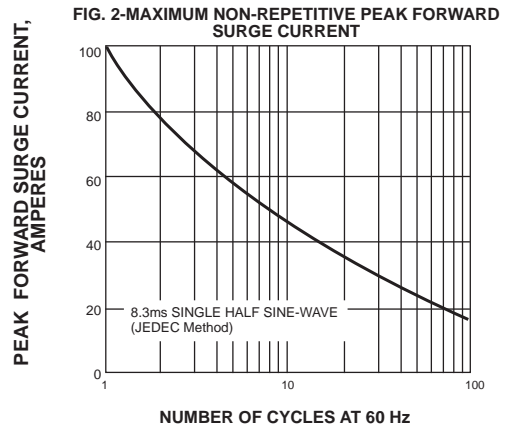
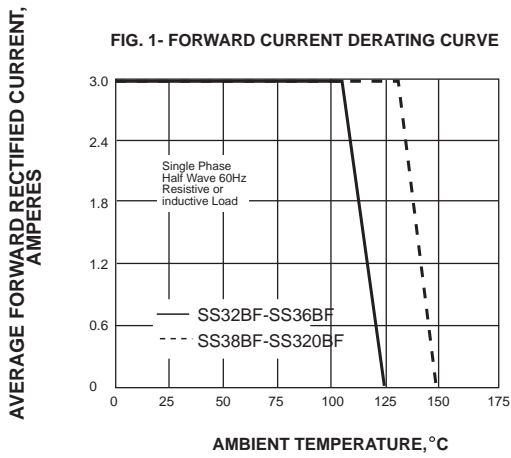
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

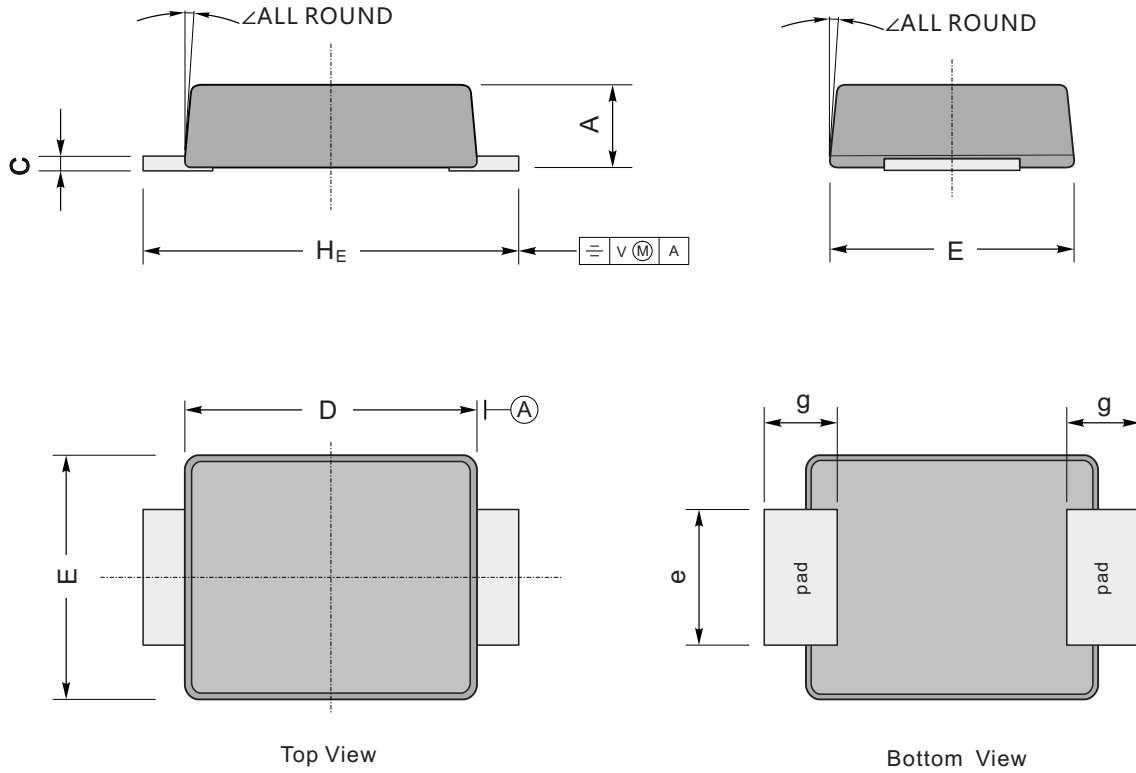
Parameter	Symbol	SS 32BF	SS 33BF	SS 34BF	SS 35BF	SS 36BF	SS 38BF	SS 310BF	SS 315 BF	SS 320 BF	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0									A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	100.0									A
Maximum Instantaneous Forward Voltage at 3A	$V_F$	0.55			0.70		0.85		0.95		V
Maximum DC Reverse Current Cat Rated DC Blocking Voltage	$I_R$ @ $T_A = 25^\circ C$ @ $T_A = 100^\circ C$	0.5						0.2			mA
		20.0				10.0		2.0		mA	
Typical Junction Capacitance(Note1)	$C_j$	500			300						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$	56.0									$^\circ C/w$
Operating Temperature Range	$T_J$	-50 to +150									$^\circ C$
Storage Temperature Range	$T_{STG}$	-50 to +150									$^\circ C$

**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

**Typical Characteristics**



**SMBF Package Outline Dimensions**



UNIT		A	C	D	E	$H_E$	e	g	$\angle$
mm	max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	9°
	min	1.1	0.18	4.2	3.5	5.1	1.9		
mil	max	51	10	173	146	216	86	40	
	min	43	7	165	138	200	75		