

Features

- ◇ For surface mounted application
- ◇ Easy pick and place
- ◇ Metal to silicon rectifier, majority carrier conduction
- ◇ Low power loss, high efficiency
- ◇ High current capability, low VF
- ◇ High surge current capability
- ◇ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ◇ Epitaxial construction
- ◇ High temperature soldering: 260°C / 10 seconds at terminals

Mechanical Data

- ◇ Case: Molded plastic
- ◇ Terminals: Pure tin plated, lead free.
- ◇ Polarity: Indicated by cathode band

UNIT		A	C	D	E	H _E	e	g	∠
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		

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	SS	SS	SS	SS	SS	SS	SS	SS	SS	Units
		22BF	23BF	24BF	25BF	26BF	29BF	210BF	215BF	220BF	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	90	100	150	220	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	63	70	105	125	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	90	100	150	220	V
Maximum Average Forward Rectified Current at T _L (See Fig. 1)	I _(AV)	2.0									A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50									A
Maximum Instantaneous Forward Voltage (Note 1) IF= 2.0A @ 25°C @ 100°C	V _F	0.5 0.4		0.70 0.65		0.85 0.70		0.95 0.80		V	
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =125°C	I _R	0.4				0.1				mA	
		10		5.0				mA			
Typical Junction Capacitance (Note 3)	C _j	130									pF
Typical Thermal Resistance (Note 2)	R _{θJL}	17									°C/W
	R _{θJA}	75									
Operating Temperature Range	T _J	-65 to +125			-65 to +150						°C
Storage Temperature Range	T _{STG}	-65 to +150									°C

- Notes:
1. Pulse Test with PW=300 usec, 1% Duty Cycle
 2. Measured on P.C.Board with 0.4" x 0.4"(10mm x 10mm) Copper Pad Areas.
 3. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SS22BF THRU SS220BF)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

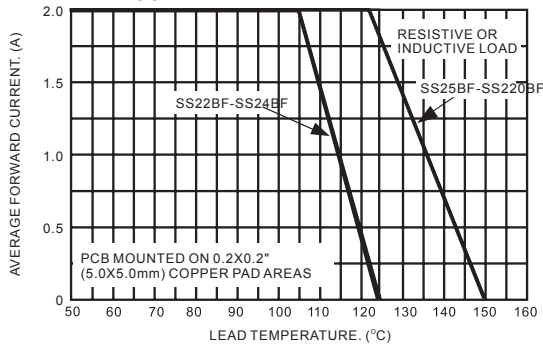


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

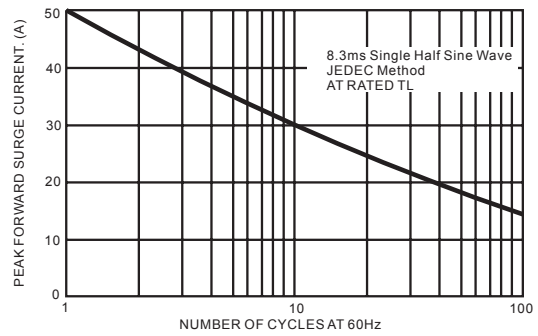


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

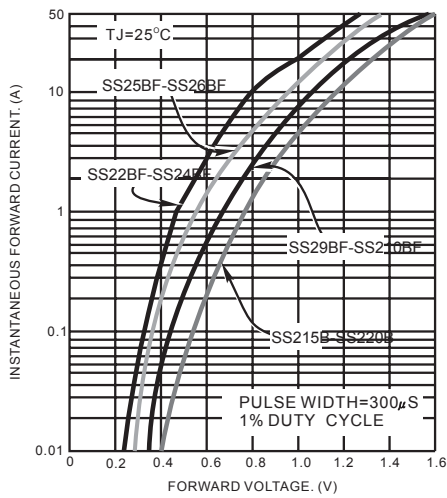


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

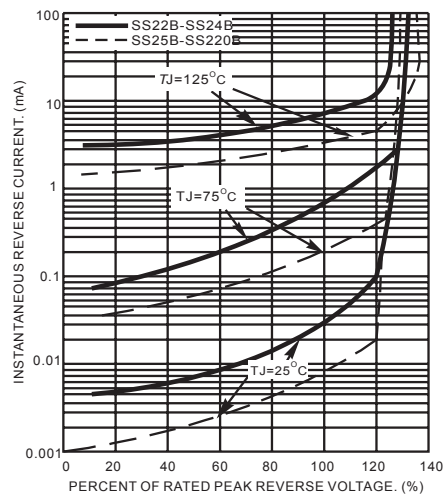


FIG. 5- TYPICAL JUNCTION CAPACITANCE

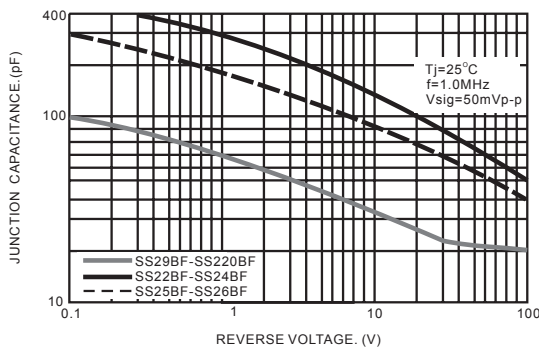


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS

