

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 22BF	SS 23BF	SS 24BF	SS 25BF	SS 26BF	SS 29BF	SS 210BF	SS 215BF	SS 220BF	Units
Marking		SS22F	SS23F	SS24F	SS25F	SS26F	SS29F	SS210F	SS215F	SS220F	
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 _J (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 mA	
		10		5.0							
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

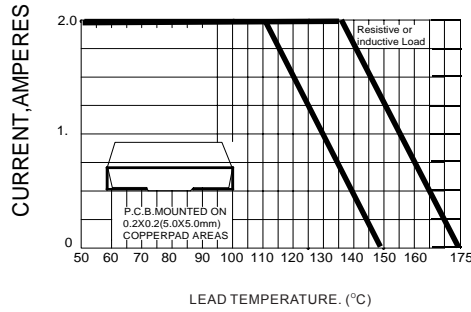


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

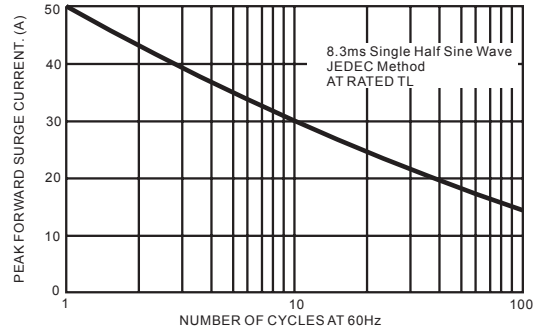


FIG.3- TYPICAL FORWARD CHARACTERISTICS

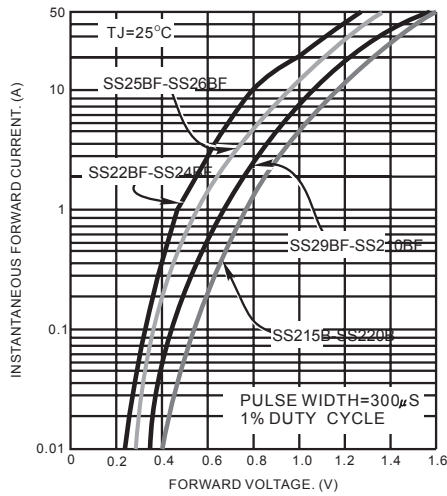


FIG.4- TYPICAL REVERSE CHARACTERISTICS

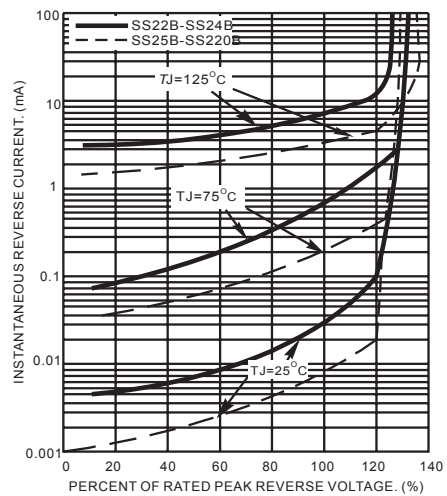


FIG.5- TYPICAL JUNCTION CAPACITANCE

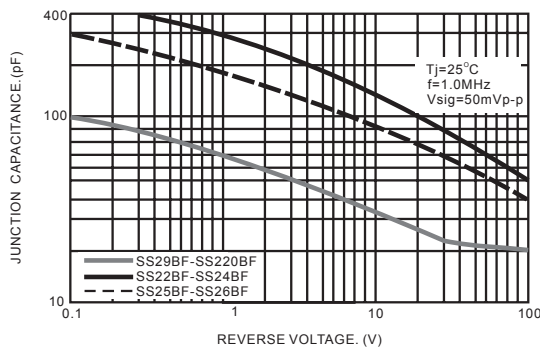
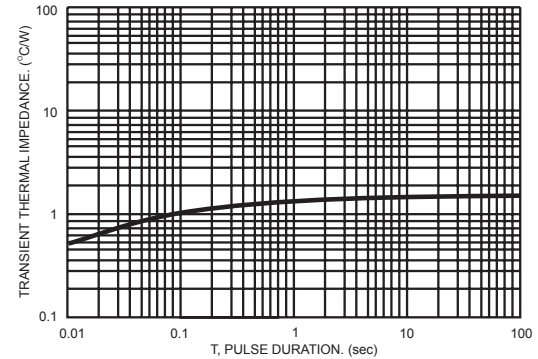


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMBF	5000/REEL	8000	36X35.8X36.5	12.00	11.00