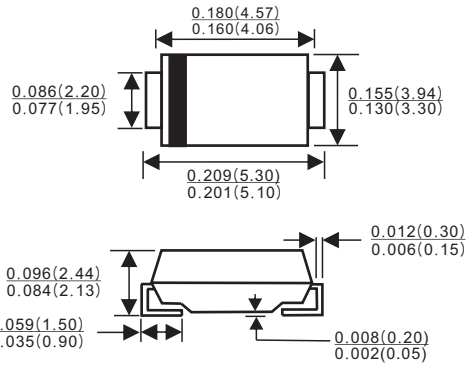




SMB/DO-214AA

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
- ✧ Weight: 0.093gram

Dimensions in inches and(millimeters)

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 22B	SS 23B	SS 24B	SS 25B	SS 26B	SS 29B	SS 210B	SS 215B	SS 220B	Units
Marking code	Symbol	SS 22	SS 23	SS 24	SS 25	SS 26	SS 29	SS 210	SS 215	SS 220	Units
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) $I_F = 2.0A$ @ 25°C @ 100°C	V_F	0.55 0.4			0.70 0.65		0.85 0.70		0.95 0.80		V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 125^\circ C$	I_R	0.4				0.1					mA mA
Typical Junction Capacitance (Note 3)	C_j	130									pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$	17 75									°C/W
Operating Temperature Range	T_J	-55 to +150								-55 to +175	°C
Storage Temperature Range	T_{STG}	-55 to +150								-55 to +175	°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 (SS22B THRU SS220B)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

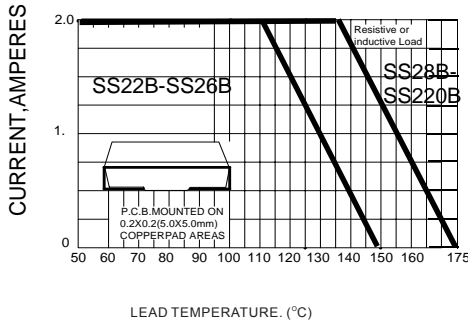


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

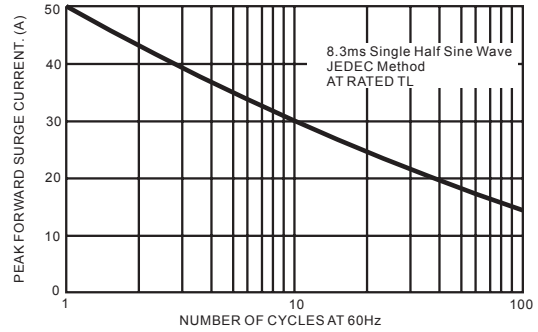


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

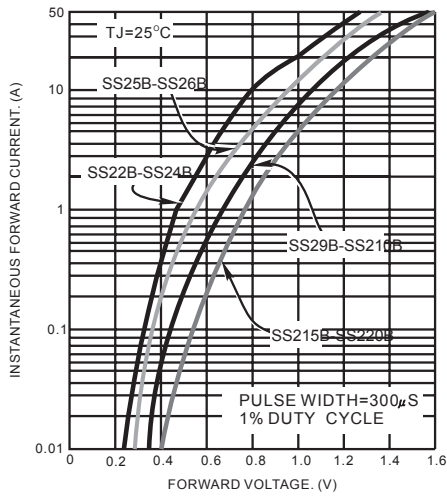


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

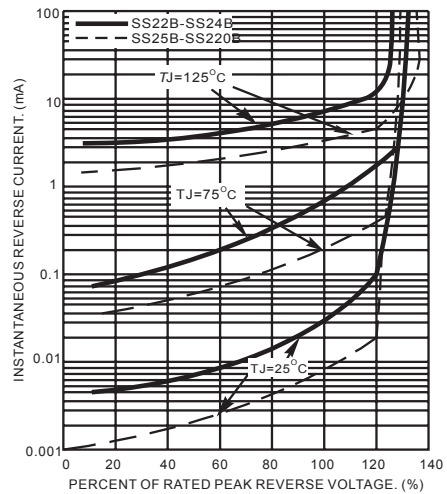


FIG. 5- TYPICAL JUNCTION CAPACITANCE

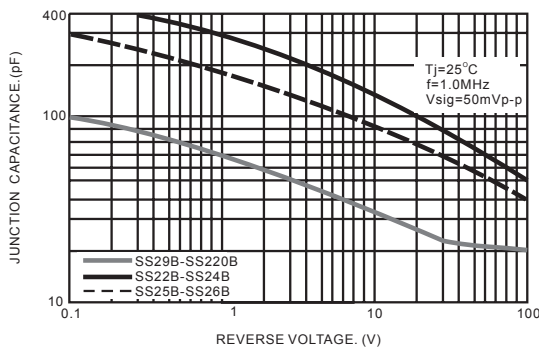
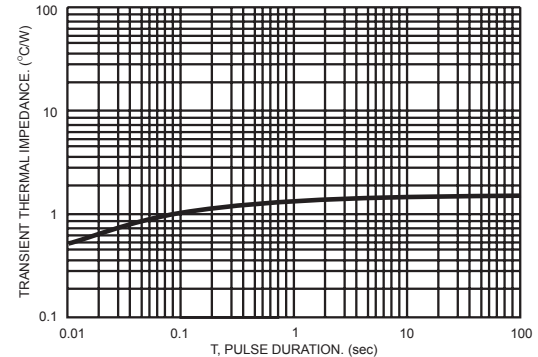


FIG. 6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMB	3000/REEL	48000	36X35.8X36.5	12.00	11.00