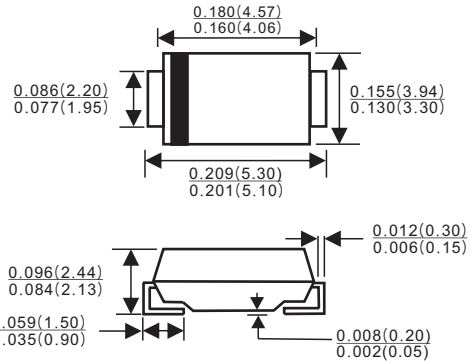




SMB/DO-214AA

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: JEDEC SMB/DO-214AA Molded plastic
- ◇ Terminals: Pure tin plated, lead free
- ◇ Polarity: Indicated by cathode band
- ◇ Weight: 0.064 gram

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

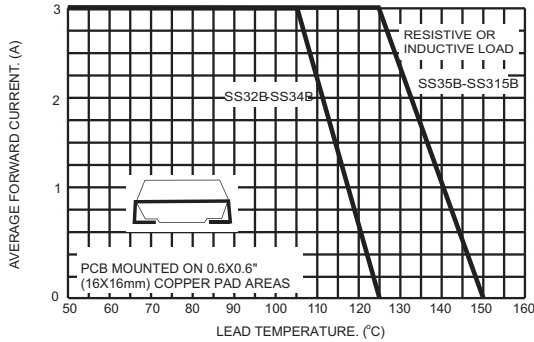
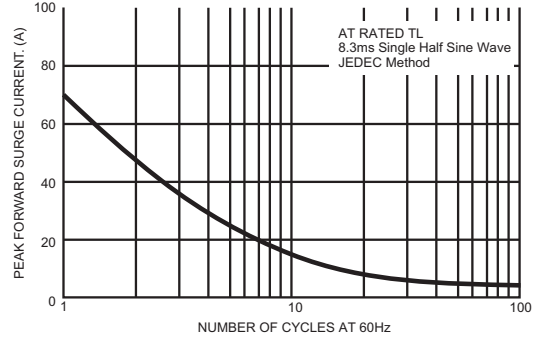
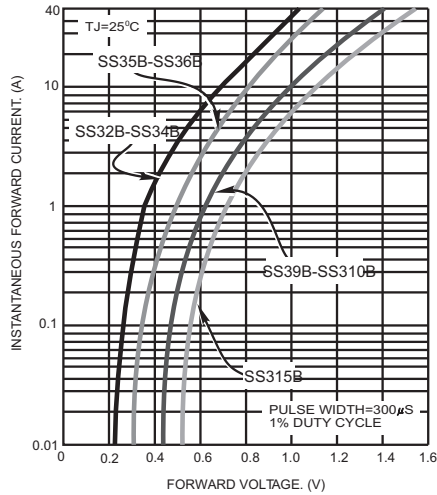
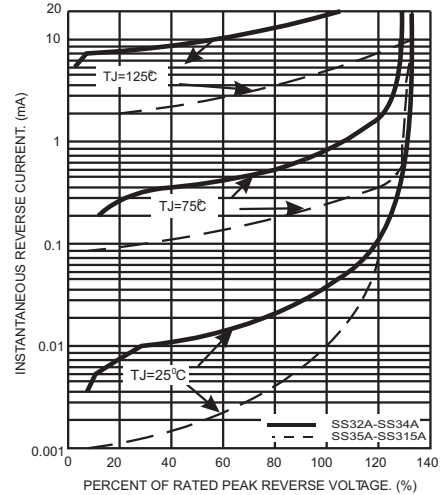
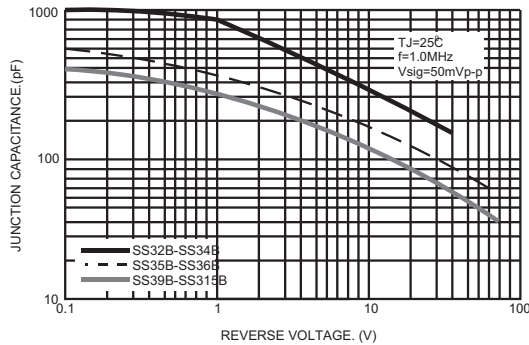
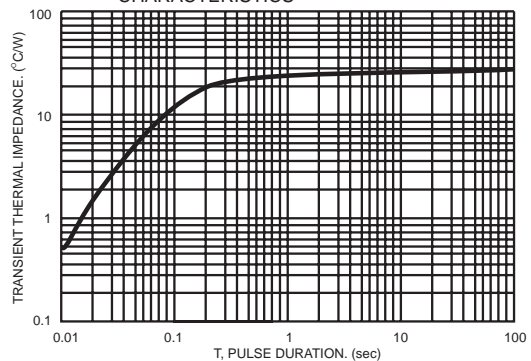
Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	BR 33	BR 34	BR 35	BR 36	BR 39	BR 310	BR 315	BR 320	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	40	50	60	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	21	28	35	42	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	30	40	50	60	90	100	150	200	V
Maximum Average Forward Rectified Current at T_L (See Fig. 1)	$I_{(AV)}$	3.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	80								A
Maximum Forward Voltage at 3A (Note 1)	V_F	0.7	0.75			0.85			V	
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	0.05								mA
		20								
Typical Thermal Resistance	$R_{\theta JL}$	25								$^\circ\text{C/W}$
	$R_{\theta JA}$	75								
Operating Temperature Range	T_J	-55 to +125								$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150								$^\circ\text{C}$

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle

RATINGS AND CHARACTERISTIC CURVES (SS32B THRU SS315B)
FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

FIG.2- MAXIMUM NON-REPETITIVE PEAK 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