



SS22 THRU SS210

2.0 AMPS. Surface Mount Schottky Barrier Rectifiers



Voltage Range
20 to 100 Volts
Current
2.0 Amperes

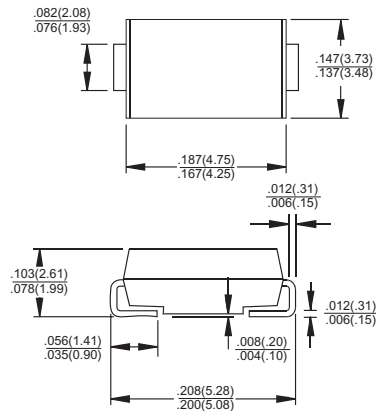
Features

- ✦ For surface mounted application
- ✦ Metal to silicon rectifier, majority carrier conduction
- ✦ Low forward voltage drop
- ✦ Easy pick and place
- ✦ 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: Solder plated
- ✦ Polarity: Indicated by cathode band
- ✦ Packaging: 12mm tape per EIA STD RS-481
- ✦ Weight: 0.093gram

SMB/DO-214AA



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 22	SS 23	SS 24	SS 25	SS 26	SS 29	SS 210	Units	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	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) @ 2.0A	V_F	0.5		0.70		0.85		V		
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_R	0.4					0.1		mA	
		20		10.0		20				
Typical Junction Capacitance (Note 3)	C_j	130							pF	
Typical Thermal Resistance (Note 2)	$R_{\theta_{JL}}$	17							$^{\circ}\text{C}/\text{W}$	
	$R_{\theta_{JA}}$	75								
Operating Temperature Range	T_J	-65 to +125			-65 to +150				$^{\circ}\text{C}$	
Storage Temperature Range	T_{STG}	-65 to +150								$^{\circ}\text{C}$

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

2. Measured on P.C.Board with 0.4 x 0.4" (10 x 10mm) Copper Pad Areas.

3. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SS22 THRU SS210)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

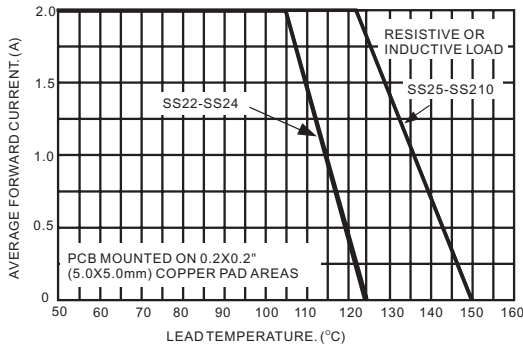


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

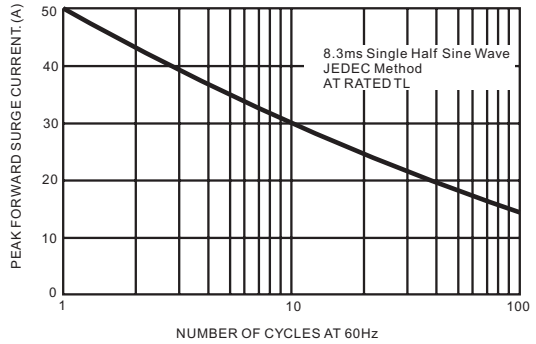


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

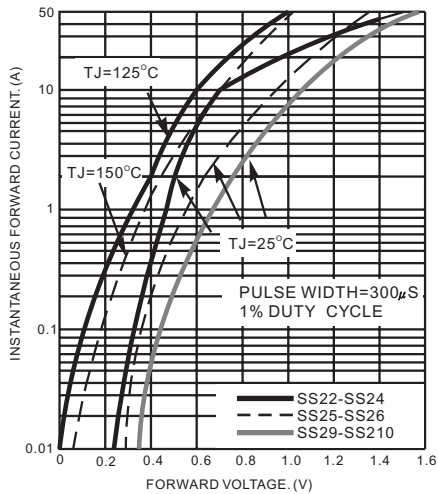


FIG. 4- TYPICAL REVERSE CHARACTERISTICS

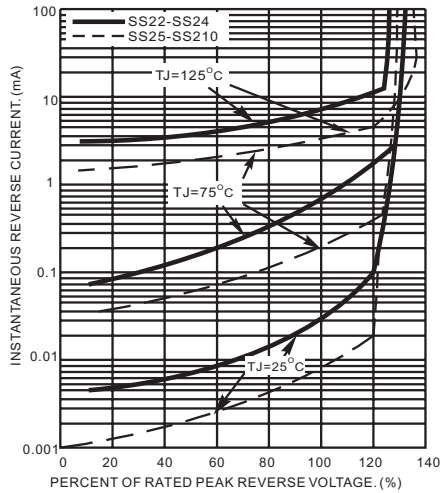


FIG. 5- TYPICAL JUNCTION CAPACITANCE

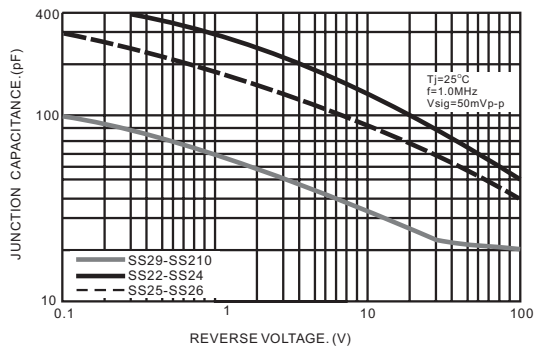


FIG. 6- TYPICAL CAPACITANCE

