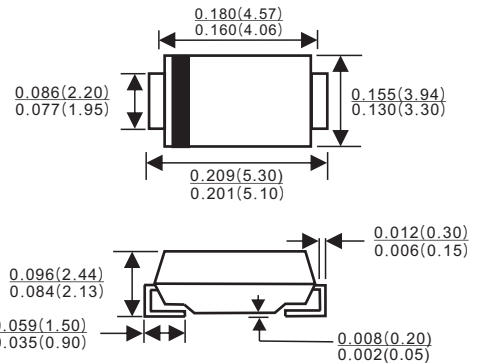




**REVERSE VOLTAGE: 50 — 1000 V**  
**CURRENT: 3.0 A**

## SMB/DO-214AA



Dimensions in inches and (millimeters)

### Features

- ✧ Plastic package has underwriters laborator flammability classification 94V-0
- ✧ For surface mounted applications
- ✧ Low profile package
- ✧ Built-in strain relief, ideal for automated placement
- ✧ Glass passivated chip junction
- ✧ High temperature soldering: 250°C/10 seconds at terminals

### Mechanical Data

- ✧ Case: JEDEC DO-214AA, molded plastic over passivated chip
- ✧ Polarity: color band denotes cathode end
- ✧ Weight: 0.003 ounces, 0.093 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

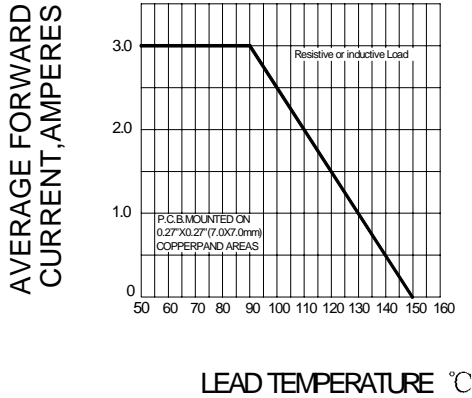
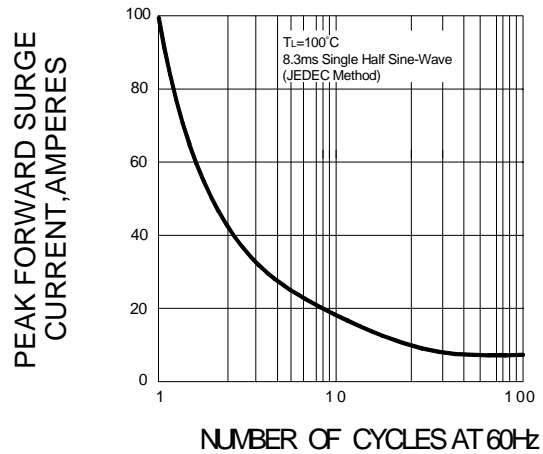
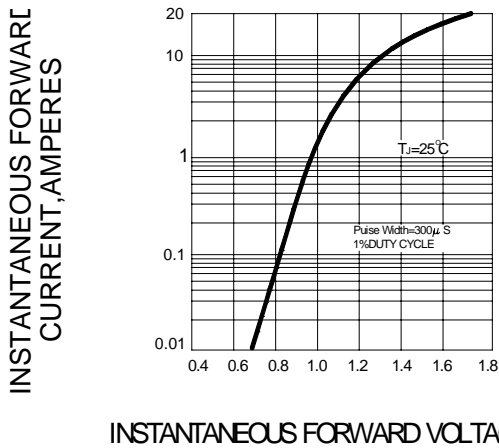
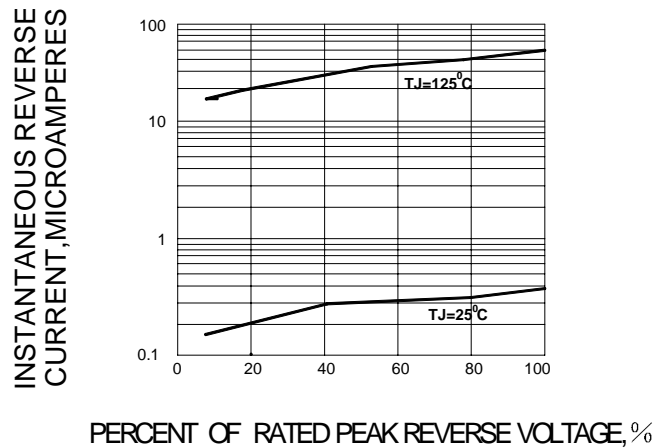
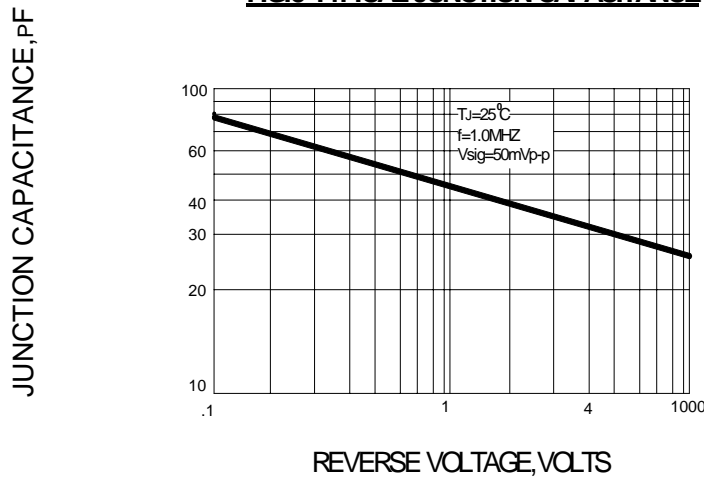
		RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak forward surge current @ $T_L = 110^\circ\text{C}$ 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	100.0							A
Maximum instantaneous forward voltage at 3.0A	$V_F$	1.30							V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	$I_R$	5.0 200.0							$\mu\text{A}$
Maximum reverse recovery time (NOTE 1)	$t_{rr}$	150				250	500		ns
Typical junction capacitance (NOTE 2)	$C_J$	32							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	40.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J T_{STG}$	-55-----+150							$^\circ\text{C}$

NOTE: 1.Reverse recovery time test conditions:  $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$

2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts

3. Thermal resistance from junction to ambient and junction to lead P.C.B.mounted on 0.2"X0.2"(5.0X5.0mm<sup>2</sup>) copper pad areas

# Ratings AND Characteristic Curves

**FIG.1 – FORWARD DERATING CURVE**

**FIG.2 PEAK FORWARD SURGE CURRENT**

**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**

**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

**FIG.5-TYPICAL JUNCTION CAPACITANCE**


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