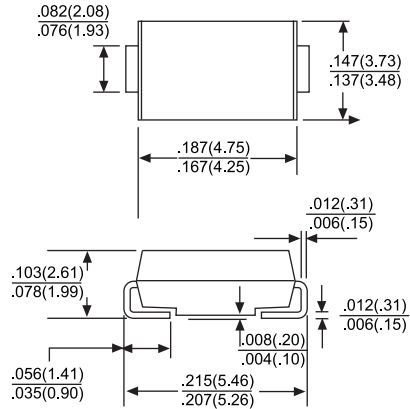


# RS2A THRU RS2M

## 1.5 AMPS. FAST RECOVERY SURFACE MOUNT RECTIFIERS

**Voltage Range**  
50 to 1000 Volts  
**Current**  
1.5 Amperes

### SMB/DO-214AA



#### Features

- For surface mounted application
- Class passivated junction chip.
- Built-in strain relief, ideal for automated placement
- Plastic material used carriers Underwriters Laboratory Classification 94V-O
- Fast switching for high efficiency
- High temperature soldering: 250°C/ 10 seconds at terminals

#### Mechanical Data

- Case: Molded plastic
- Terminals: Solder plated
- Polarity: Indicated by cathode band
- Packaging: 12mm tape per E1A STD RS-481
- Weight: 0.093 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Type Number		RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current See Fig.1 @T <sub>L</sub> =100°C	I <sub>F(AV)</sub>	1.5							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	50							A
Maximum Instantaneous Forward Voltage @ 1.5A	V <sub>F</sub>	1.3							V
Maximum DC Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 125°C	I <sub>R</sub>	5 200							µA µA
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	150			250		500		nS
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	50							pF
Typical Thermal Resistance(Note 3)	R <sub>θJA</sub> R <sub>θJL</sub>	55.0 18.0							°C/W °C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to+150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to+150							°C

NOTES: 1.Reverse Recovery Test Conditions:I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>RR</sub>=0.25A  
2.Measured at 1MHz and Applied V<sub>R</sub>=4.0 Volts  
3.Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.27" x0.27"  
(7.0 x 7.0 mm) Copper Pad Areas.

# RATING AND CHARACTERISTIC CURVES RS2A THRU RS2M

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

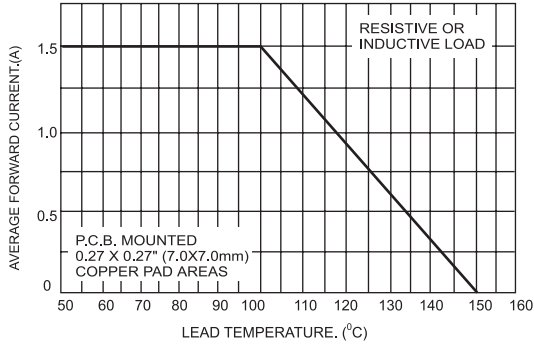


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

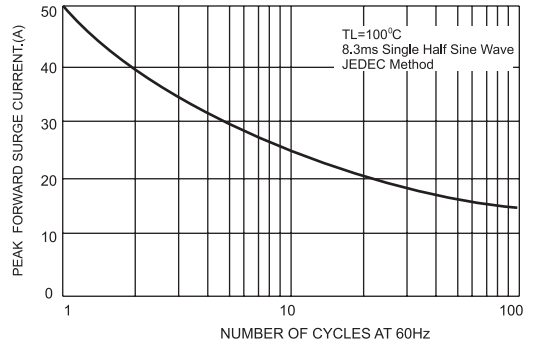


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

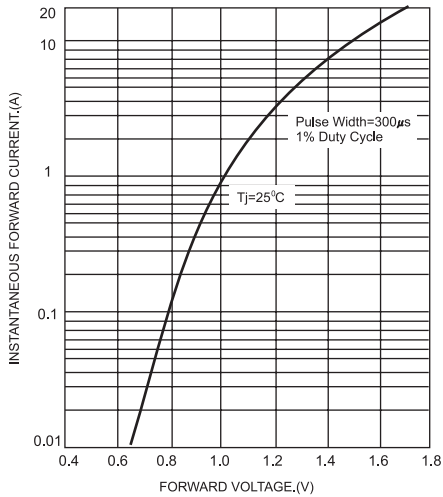


FIG.4-TYPICAL REVERSE CHARACTERISTICS

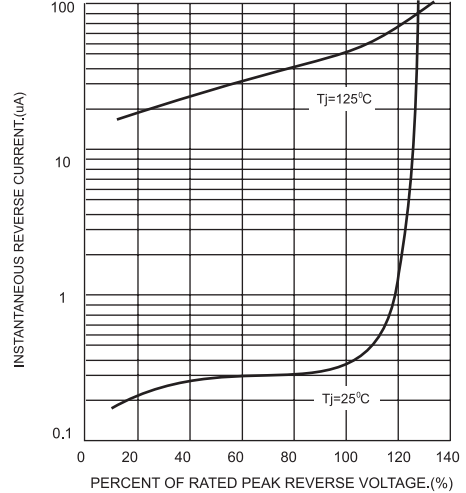


FIG.5-TYPICAL JUNCTION CAPACITANCE

