



# RS1A(H) THRU RS1M(H)

## 1.0AMP SURFACE MOUNT GLASS FAST RECOVERY RECTIFIER

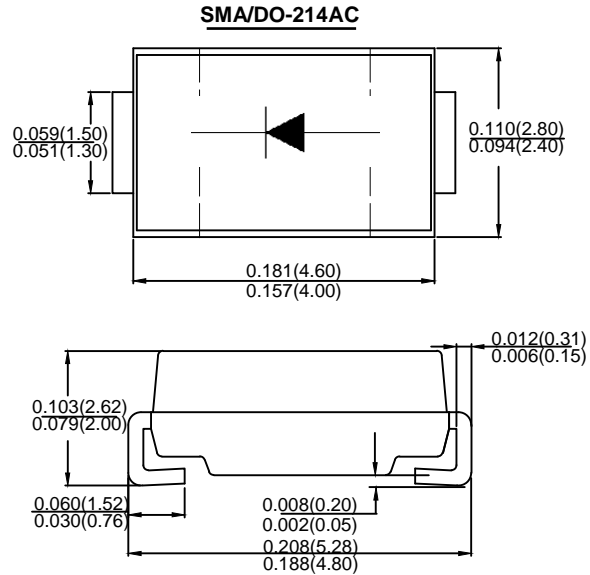
### Features

- Fast switching for high efficiency
- Low Power Loss,High Efficiency
- High current capability
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability

Classification Rating 94V-0

### Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity:Cathode Band or Cathode Notch
- Mounting Position: Any
- Making: Type Number



Dimensions in inches and (millimeters)

### 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  | SYMBOL          | RS1A(H)     | RS1B(H) | RS1D(H) | RS1G(H) | RS1J(H) | RS1K(H) | RS1M(H) | Unit               |
|--|-----------------|-------------|---------|---------|---------|---------|---------|---------|--------------------|
| 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                  |
| Average Rectified Output Current<br>@ $T_L = 100^\circ\text{C}$                                  | $I_{F(AV)}$     | 1.0         |         |         |         |         |         |         | A                  |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$       | 30          |         |         |         |         |         |         | A                  |
| Rating for fusing (t<8.3ms)  | $I^2t$          | 3.74        |         |         |         |         |         |         | $A^2s$             |
| Forward Voltage @ $I_F=1.0A$   | $V_{FM}$        | 1.3         |         |         |         |         |         |         | V                  |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$  | $I_R$           | 5.0         |         |         |         |         |         |         | uA                 |
| At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$   |                 | 200         |         |         |         |         |         |         |                    |
| Maximum Reverse Recovery Time (Note 1)   | $T_{rr}$        | 150         |         |         |         | 250     | 500     |         | ns                 |
| Typical Junction Capacitance (Note 2)  | $C_J$           | 7           |         |         |         |         |         |         | pF                 |
| Typical Thermal Resistance Junction to Ambient (Note 3)  | $R_{\theta JA}$ | 100         |         |         |         |         |         |         | $^\circ\text{C/W}$ |
|  | $R_{\theta JL}$ | 32          |         |         |         |         |         |         |                    |
| Operating Temperature Range  | $T_J$           | -55 to +150 |         |         |         |         |         |         | $^\circ\text{C}$   |
| Storage Temperature Range  | $T_{STG}$       | -55 to +150 |         |         |         |         |         |         | $^\circ\text{C}$   |

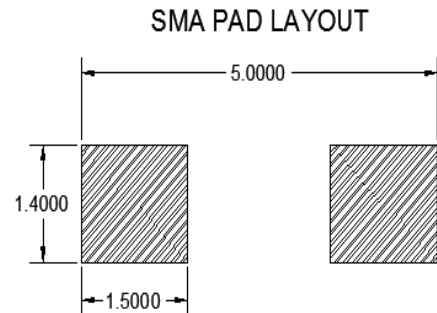
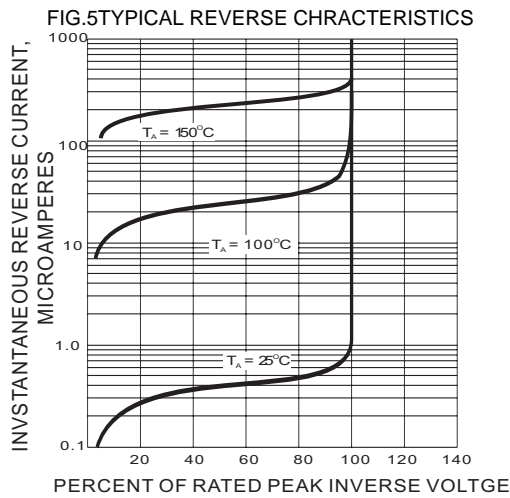
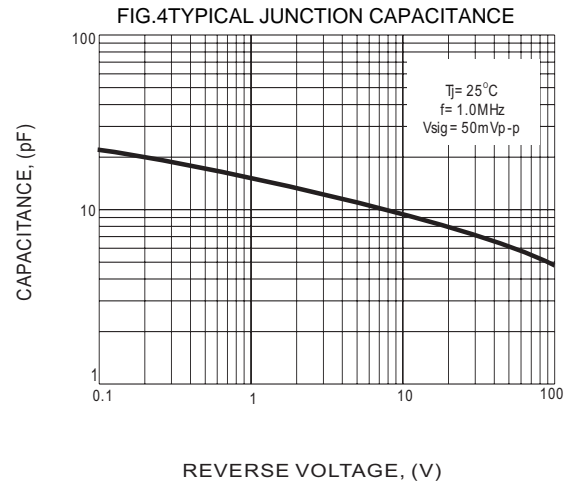
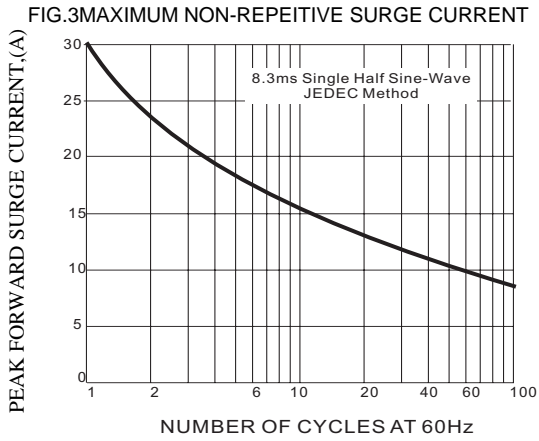
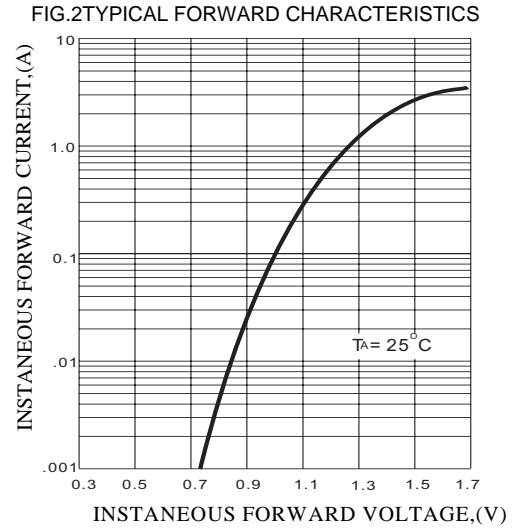
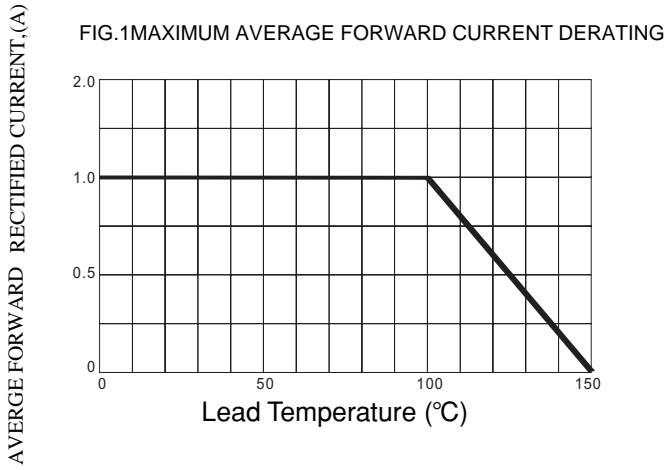
Note: 1.Reverse Recovery Test Conditions:  $I_F=0.5A, I_R=1.0A, I_{RR}=0.25A$ .

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

3. Device mounted on FR-4 substrate, 1"×1", 2oz, single-sided, PC boards with 0.1"×0.15" copper pad.



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