

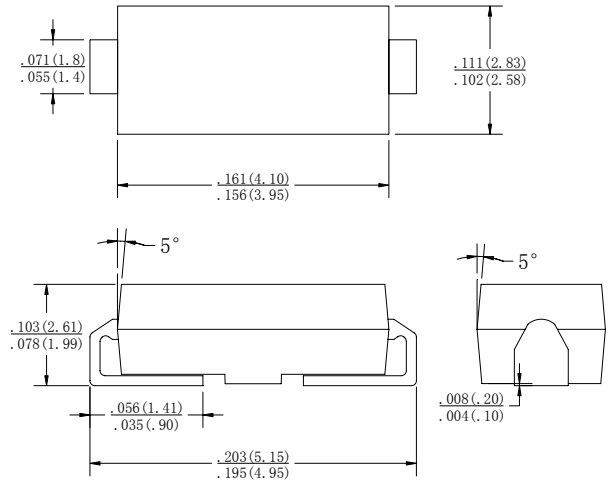
**REVERSE VOLTGE 50V~1000V**

**FORWARD CURRENT 1.0AMP Surface Mount Rectifiers**

**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 materal used carriers Underwr Laboratory Classification 94V-0
- \* Epitaxial construction
- \* High temperature soldering:  
260" /10 seconds at terminals

**DO-214AC (SMA)**



**MECHANICAL DATA**

- \* Case: molded plastic
- \* Terminals: Solder plated
- \* Polarity: Indicated by cathode band
- \* Packaging:12mm tape EIA STD RS- 481
- \* Weight:0.064gram

**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   |                    | S1A        | S1B | S1D | S1G | S1J | S1K | S1M  | 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 @ T <sub>L</sub> =110°C                                 | I <sub>F(AV)</sub> | 1.0        |     |     |     |     |     |      | A     |
| Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I <sub>FSM</sub>   | 30         |     |     |     |     |     |      | A     |
| Maximum Instantaneous Forward Voltage (Note@1.0 A)  | V <sub>F</sub>     | 1.1        |     |     |     |     |     |      | V     |
| Maximum DC Reverse Crrent @ TA=25°C<br>At Rated DC Blocking Voltage @ TA=125°C                    | I <sub>R</sub>     | 5.0<br>50  |     |     |     |     |     |      | uA    |
| Typical Thermal Resistance (Note )  | R <sub>θJL</sub>   | 27         |     |     |     |     | 30  |      | °C/W  |
|   | R <sub>θJA</sub>   | 75         |     |     |     |     | 85  |      |       |
| Operating J unction Temperature Range   | T <sub>J</sub>     | - 55to+150 |     |     |     |     |     |      | °C    |
| Storage Temperature Ranage  | T <sub>STG</sub>   | - 55to+150 |     |     |     |     |     |      | °C    |

**NOTE:** Measured on P.C. Board with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas.



## Ratings and Characteristic Curves (Ta = 25°C unless otherwise noted)

