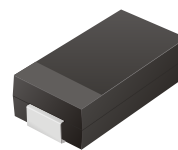


## CURA101 Thru CURA107

**Reverse Voltage: 50 - 1000 Volts**  
**Forward Current: 1.0 Amp**

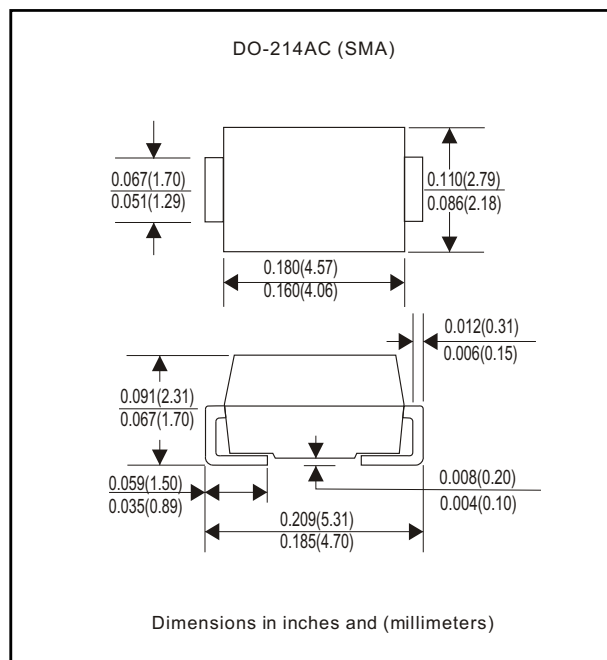


### Features

- Ideal for surface mount applications
- Easy pick and place
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Ultra fast recovery time: 50 - 75 nS
- Low leakage current

### Mechanical data

- Case: Mini SMA/SOD-123 molded plastic
- Terminals: solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Approx. Weight: 0.063 gram



### Maximum Ratings and Electrical Characteristics

| Parameter                                                                                                 | Symbol           | CURA 101    | CURA 102 | CURA 103 | CURA 104 | CURA 105 | CURA 106 | CURA 107 | Unit |
|-----------------------------------------------------------------------------------------------------------|------------------|-------------|----------|----------|----------|----------|----------|----------|------|
| Max. Repetitive Peak Reverse Voltage                                                                      | V <sub>RRM</sub> | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V    |
| Max. DC Blocking Voltage                                                                                  | V <sub>DC</sub>  | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V    |
| Max. RMS Voltage                                                                                          | V <sub>RMS</sub> | 35          | 70       | 140      | 280      | 420      | 560      | 700      | V    |
| Peak Surge Forward Current<br>8.3ms single half sine-wave<br>superimposed on rateload<br>( JEDEC method ) | I <sub>FSM</sub> | 30          |          |          |          |          |          |          | A    |
| Max. Average Forward Current                                                                              | I <sub>O</sub>   | 1.0         |          |          |          |          |          |          | A    |
| Max. Instantaneous Forward Current<br>at 1.0 A                                                            | V <sub>F</sub>   | 1.0         |          |          | 1.3      | 1.7      |          |          | V    |
| Reverse recovery time                                                                                     | T <sub>rr</sub>  | 50          |          |          |          | 75       |          |          | nS   |
| Max. DC Reverse Current at Rated DC<br>Blocking Voltage<br>Ta=25°C<br>Ta=100°C                            | I <sub>R</sub>   | 5.0<br>50   |          |          |          |          |          |          | uA   |
| Max. Thermal Resistance (Note 1)                                                                          | R <sub>θJA</sub> | 42          |          |          |          |          |          |          | °C/W |
| Operating Junction Temperature                                                                            | T <sub>j</sub>   | -55 to +150 |          |          |          |          |          |          | °C   |
| Storage Temperature                                                                                       | T <sub>STG</sub> | -55 to +150 |          |          |          |          |          |          | °C   |

Note 1: Thermal resistance from junction to ambient.

## Rating and Characteristic Curves (CURA101 Thru CURA107)

Fig. 1 - Reverse Characteristics

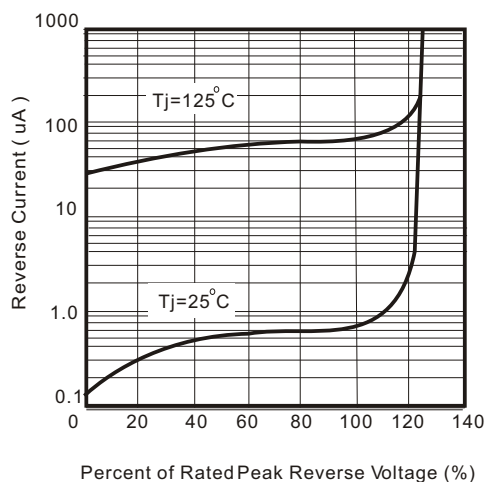


Fig.2 - Forward Characteristics

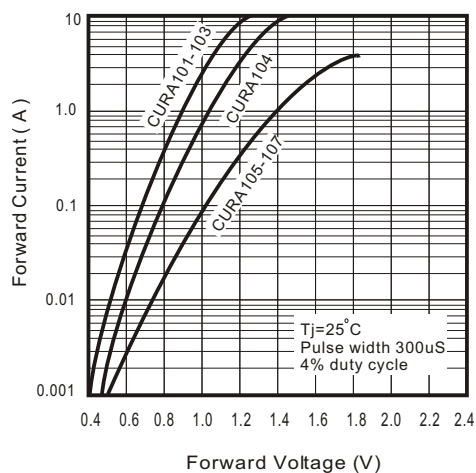


Fig. 3 - Junction Capacitance

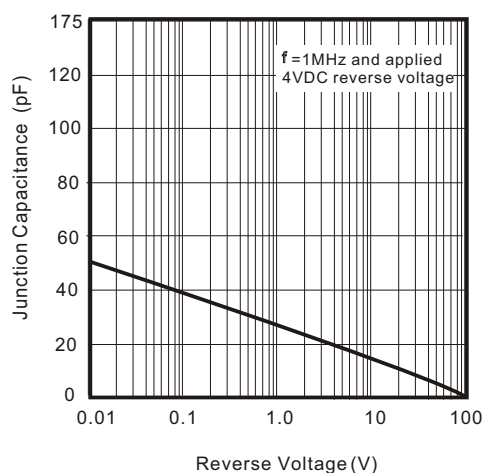


Fig. 4 - Non Repetitive Forward Surge Current

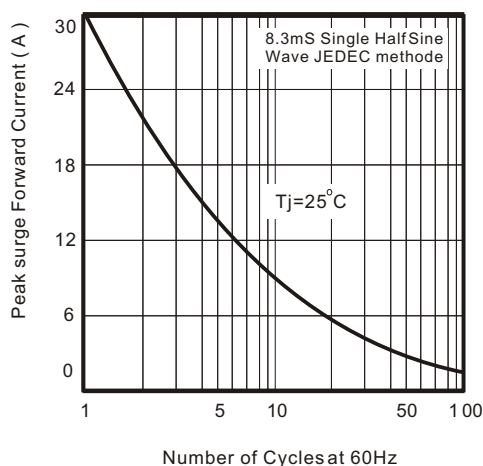


Fig. 5 - Test Circuit Diagram and Reverse Recovery Time Characteristics

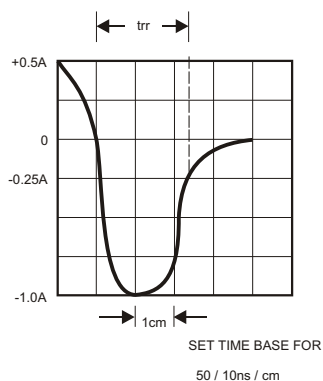
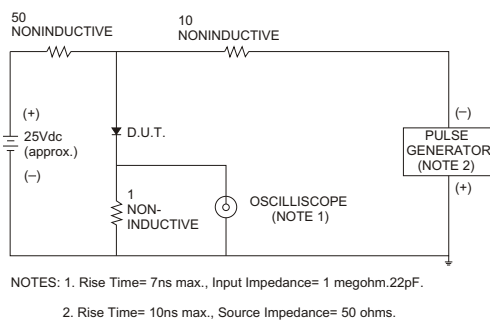


Fig. 6 - Current Derating Curve

