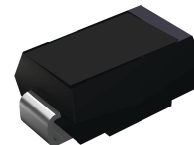


## Features

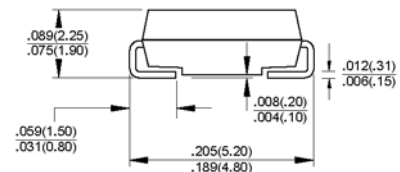
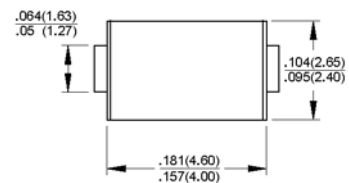
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief, ideal for automated placement
- Glass passivated chip junction
- High temperature soldering:  
250°C/10 seconds at terminals

## Mechanical Data

- Case: JEDEC DO-214AC (SMA) molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounce, 0.064 gram



Package: DO-214AC (SMA)



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

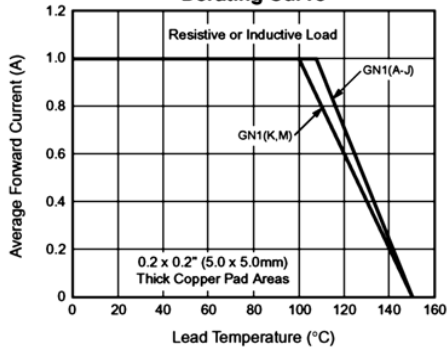
(T<sub>A</sub>=25°C unless otherwise specified)

| Parameter                                                                                                     | Symbols            | SN1P        | Units |
|---------------------------------------------------------------------------------------------------------------|--------------------|-------------|-------|
| Maximum Repetitive Peak Reverse Voltage                                                                       | V <sub>RRM</sub>   | 1300        | V     |
| Maximum RMS Voltage                                                                                           | V <sub>RMS</sub>   | 910         | V     |
| Maximum DC Blocking Voltage                                                                                   | V <sub>DC</sub>    | 1300        | V     |
| Maximum Average Forward Rectified Current                                                                     | I <sub>F(AV)</sub> | 1.0         | A     |
| Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load) @ T <sub>J</sub> =110°C  | I <sub>FSM</sub>   | 30.0        | A     |
| Maximum Instantaneous Forward Voltage @1A                                                                     | V <sub>F</sub>     | 1.10        | V     |
| Maximum DC Reverse Current at<br>@T <sub>A</sub> =25°C<br>rated DC Blocking Voltage<br>@T <sub>A</sub> =125°C | I <sub>R</sub>     | 5.0<br>50   | uA    |
| Typical Reverse Recovery Time<br>I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A<br>I <sub>tr</sub> =0.25A         | t <sub>rr</sub>    | 1.0         | us    |
| Typical Junction Capacitance @4.0 V, 1 MHz                                                                    | C <sub>J</sub>     | 12          | pF    |
| Typical Thermal Resistance <sup>1)</sup>                                                                      | R <sub>θJA</sub>   | 85          | °C/W  |
|                                                                                                               | R <sub>θJL</sub>   | 30          |       |
| Operating Junction Temperature                                                                                | T <sub>J</sub>     | -55 to +150 | °C    |
| Storage Temperature                                                                                           | T <sub>STG</sub>   | -55 to +150 | °C    |

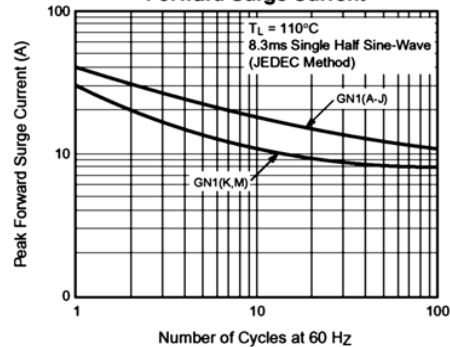
**Notes:** 1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

## Ratings and Characteristic Curves

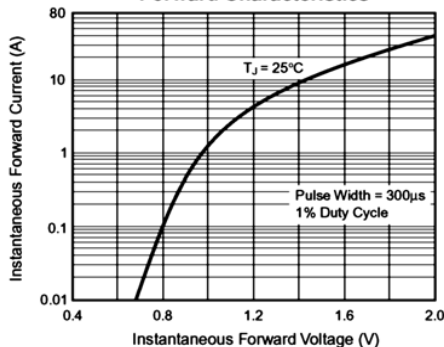
**Fig. 1 – Forward Current Derating Curve**



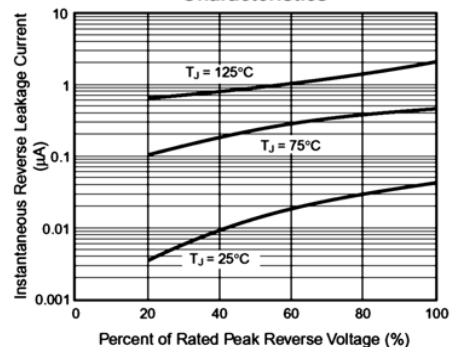
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



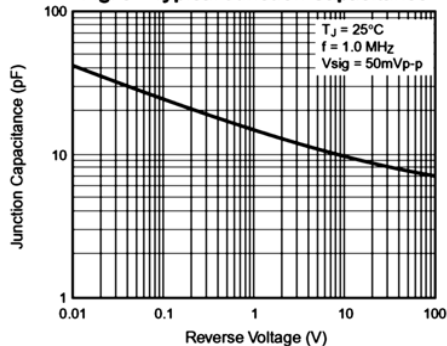
**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Leakage Characteristics**



**Fig. 5 – Typical Junction Capacitance**



**Fig. 6 – Transient Thermal Impedance**

