



## FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* High surge current capability

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-202F, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.063 gram

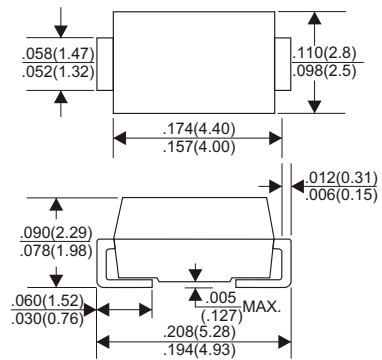
## VOLTAGE RANGE

1600 to 2000 Volts

## CURRENT

1.5 Ampere

### DO-214AC(SMA)



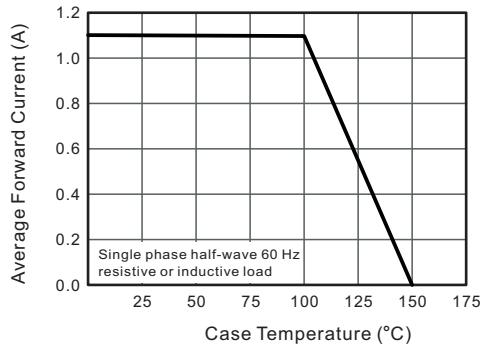
### ■ Absolute Maximum Ratings Ta = 25°C

| Parameter                                                                                         | Symbols         | GS1Y       | GS1Z | Units              |
|---------------------------------------------------------------------------------------------------|-----------------|------------|------|--------------------|
| Maximum Repetitive Peak Reverse Voltage                                                           | $V_{RRM}$       | 1600       | 2000 | V                  |
| Maximum Average Forward Rectified Current at $T_c = 100^\circ\text{C}$                            | $I_{F(AV)}$     | 1.5        |      | A                  |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$       | 30         |      | A                  |
| Maximum Instantaneous Forward Voltage at 1.5A                                                     | $V_F$           | 1.15       |      | V                  |
| Maximum Reverse Current<br>$T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$                  | $I_R$           | 5<br>50    |      | $\mu\text{A}$      |
| Typical Junction Capacitance <sup>1)</sup>                                                        | $C_j$           | 20         |      | pF                 |
| Typical Thermal Resistance <sup>2)</sup>                                                          | $R_{\theta JA}$ | 95         |      | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range                                                           | $T_J, T_{stg}$  | -55 ~ +150 |      | $^\circ\text{C}$   |

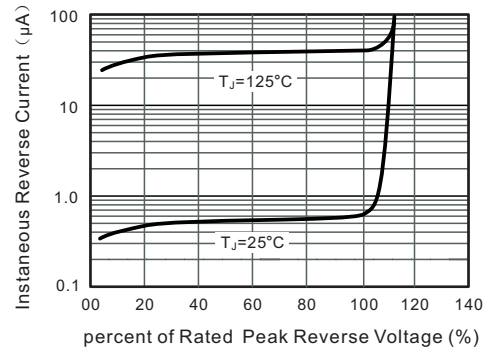
Measured at 1 MHz and applied reverse voltage of 4 V D.C  
P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.

## RATING AND CHARACTERISTIC CURVES ( GS1Y THRU GS1Z )

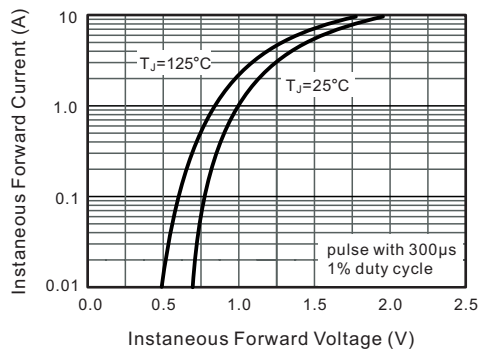
**Fig.1 Forward Current Derating Curve**



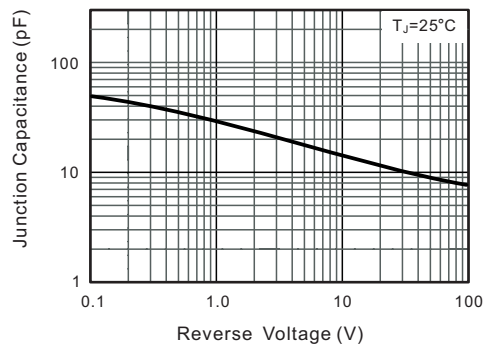
**Fig.2 Typical Reverse Characteristics**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**

