



Surface Mount General Purpose Silicon Rectifiers



## **FEATURES**

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

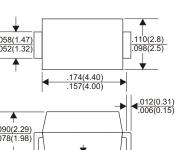
## **MECHANICAL DATA**

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

# **VOLTAGE RANGE** 2000 Volts **CURRENT**

1.0 Ampere

DO-214AC(SMA)



Dimensions in inches and (millimeters)

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

Parameter	Symbols	GS1Z	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	2000	V
Maximum Average Forward Rectified Current at $T_c$ = 100 °C	I <sub>F(AV)</sub>	1	А
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30	А
Maximum Instantaneous Forward Voltage at 1 A	V <sub>F</sub>	1.15	V
Maximum Reverse Current $T_J = 25 ^{\circ}\text{C}$ $T_J = 125 ^{\circ}\text{C}$	I <sub>R</sub>	5 50	μΑ
Typical Junction Capacitance 1)	C <sub>j</sub>	20	pF
Typical Thermal Resistance <sup>2)</sup>	R <sub>θJA</sub>	95	°C/W
Operating and Storage Temperature Range	$T_j$ , $T_{stg}$	-55 ~ +150	°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 (GS1Z)

Fig.1 Forward Current Derating Curve

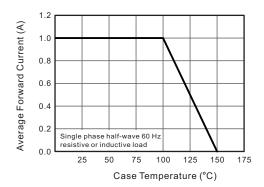


Fig.2 Typical Reverse Characteristics

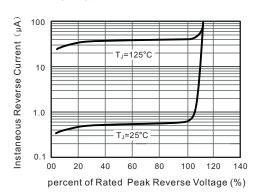


Fig.3 Typical Instaneous Forward Characteristics

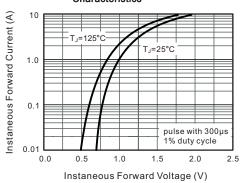


Fig.4 Typical Junction Capacitance

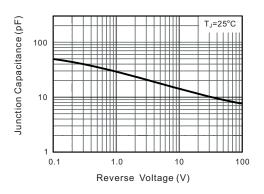


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

