# Suntan<sub>®</sub> Su<sub>®</sub>

## **GS1A THRU GS1M**

### SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

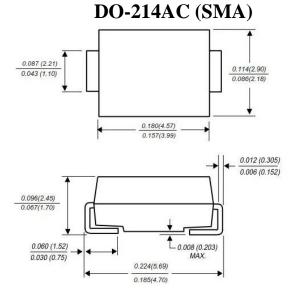
### FEATURES

- ◆The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- ♦ For surface mounted applications
- ◆Low reverse leakage
- ♦ Built-in strain relief, ideal for automated placement
- ♦ High forward surge current capability
- ♦ High temperature soldering guaranteed:

 $250^{\circ}C/10$  seconds at terminals

#### Mechanical Data

- ◆Case: JEDEC DO-214AC molded plastic body
- ◆ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- ◆ Polarity: Color band denotes cathode end
- Mounting position: Any



#### **Dimensions in inches and (millimeters)**

### 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%

PARAMETER	SYMBOL	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	UNIT
Maximum Repetitive Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	Vrms	35	70	140	280	420	560	700	VOLTS
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_L$ =55 $^{\circ}C$	I(AV)	1.0							Amp
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC	Ifsm	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	1.1							Volts
Maximum DC Reverse Current $T_A=25^{\circ}C$ at Rated DC blocking voltage $T_A=100^{\circ}C$	Ir	5.0 50.0							uA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	15.0							pF
Typical Thermal Resistance (Note 2)	Røja	75.0							°C/W
Operating junction and storage temperature range	T <sub>J</sub> ,Tstg	-65 to +175							°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

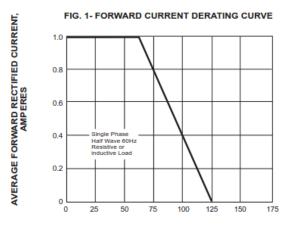
# Suntan<sub>®</sub>Su<sub>®</sub>

# **GS1A THRU GS1M**

## SURFACE MOUNT GENERAL RECTIFIER

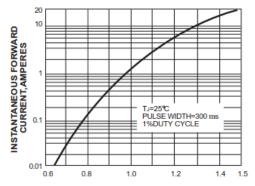
Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

### **RATING AND CHARACTERISTIC CURVES GS1A THRU GS1M**

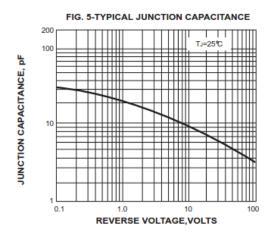


AMBIENT TEMPERATURE.°C





INSTANTANEOUS FORWARD VOLEAGE, VOLTS



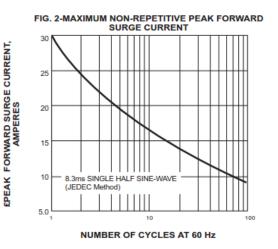


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

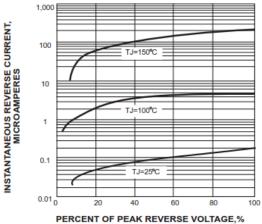


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE TRANSIENT THERMAL IMPEDANCE, °C/W 100 111 10 Ш 0.1 0.01 0.1 10 100 1

t,PULSE DURATION,sec.

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

**Suntan**<sub>®</sub> Technology Company Limited Website: www.suntan.com.hk Email: info@suntan.com.hk Tel: (852) 8202 8782 Fax: (852) 8208 6246