# Kingtronics®

## 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°C/10 seconds at terminals

#### **MECHANICAL DATA**

Case: JEDEC DO-214AC molded plastic body

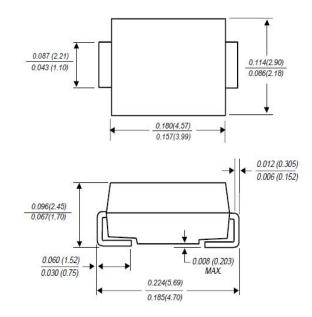
Terminals: Solder plated, solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

Mounting position: Any

#### **SMA (DO-214AC)**



#### **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25℃ ambient temperature unless otherwise specified , Dimensions in inches and (millimeters) 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 Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	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 <sub>L</sub> =55°C	I <sub>(AV)</sub>	1.0							Amp
Peak Forward Surge Current 8.3ms single half sine-wave	20.0							Amps	
superimposed on rated load (JEDEC method)	FSM	30.0							
Maximum instantaneous forward voltage at 1.0A	VF	1.1						Volts	
Maximum Reverse Current T <sub>A</sub> = 25 °C	5.0								uA
at Rated DC Blocking Voltage T <sub>A</sub> = 100 °C	I <sub>R</sub> 50								
Typical Junction Capacitance (Note 1)	Сл	15.0							pF
Typical Thermal Resistance (Note 2)	RөJA	75.0						℃W	
Operating junction and storage temperature range	TJ,Tstg	-65 to +175							$^{\circ}$ C

- 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

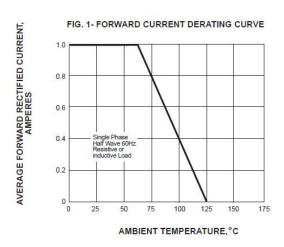
#### Kingtronics® International Company

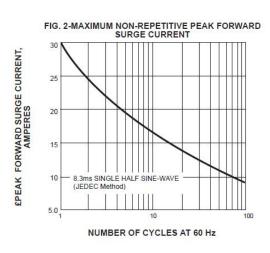
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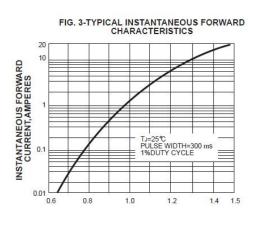
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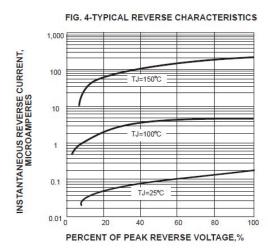
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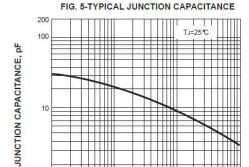
#### RATINGS AND CHARACTERISTIC CURVES



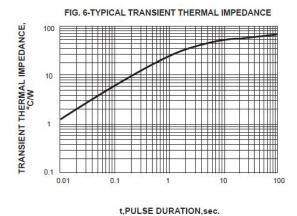








INSTANTANEOUS FORWARD VOLEAGE, VOLTS



1.0 10
REVERSE VOLTAGE, VOLTS

Note: Specifications are subject to change without notice.

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