# Kingtronics®

# GS2A THRU GS2M

### SURFACE MOUNT GLASS PASSIVATED RECTIFIER

**VOLTAGE RANGE** 50 to 1000 Volts

**CURRENT** 2.0 Ampere

**DO-214AA (SMB)** 

### **FEATURES**

Plastic package has underwrites laboratory flammability

Classification 94V-0

For surface mounted applications

Low profile package

Built-in strain relief, ideal for automated placement

Glass Passivated chip junction

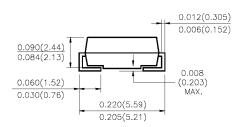
High temperature soldering guaranteed 250°C/10 second at terminals

### **MECHANICAL DATA**

**Case:** JEDED DO-214AA molded plastic over glass passivated chip **Terminals:** Solder plated, Solderable per MIL-STD-750, method 2026

Polarity: Color band denotes cathode end

## 0.086(2.20) 0.077(1.95) 0.180(4.57) 0.180(4.57) 0.160(4.06)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

### Dimensions in inches and (millimeters)

Ratings at 25°C ambient temperature unless otherwise specified

PARAMETER		SYMBOL	GS2A	GS2B	GS2D	GS2G	GS2J	GS2K	GS2M	UNITS
Maximum Repetitive Peak Reverse Voltage		$V_{RRM}$	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		$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_L = 100^{\circ}C$		I <sub>F(AV)</sub>	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) $T_L = 100^{\circ}C$		I <sub>FSM</sub>	50							Amps
Typical Thermal Resistance (NOTE 1)		$R_{\theta JA}$	53							°C/W
		R <sub>θJL</sub>	16							
Operating and Storage Temperature Range		$T_{J}, T_{STG}$	-55 to +150							$^{\circ}$
Maximum Instantaneous Forward Voltage at 1.5A		V <sub>F</sub>	1.15							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	T <sub>A</sub> = 25℃		5.0 125							μΑ
	T <sub>A</sub> = 125℃	I <sub>R</sub>								
Typical Reverse Recovery Time at I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>RR</sub> =0.25A,		Trr	2.0							μs
Typical junction capacitance at 4.0V, 1MHz		CJ	30							pF

1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B.with 0.3×0.3″ (8.0 × 8.0mm) copper pad areas.

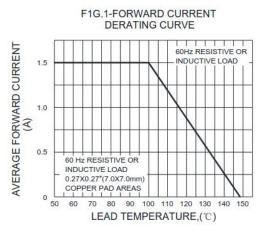
# Kingtronics ® International Company

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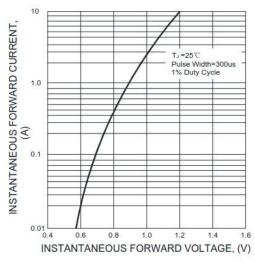
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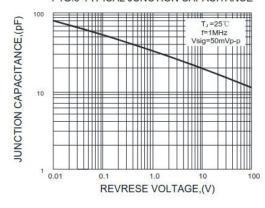
## **RATINGS AND CHARACTERISTIC CURVES**



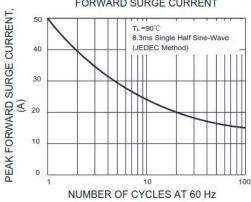
# F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



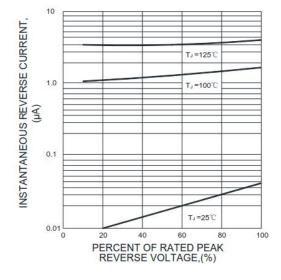
#### F1G.5-TYPICAL JUNCTION CAPACITANCE



# F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



#### F1G.4-TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice.

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