

Kingtronics®

GS2A THRU GS2M

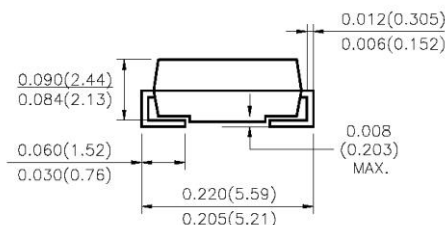
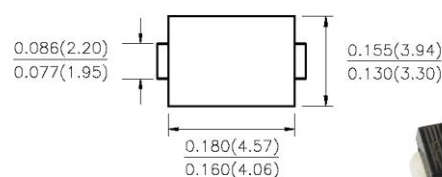
SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts **CURRENT** 2.0 Ampere

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

DO-214AA (SMB)



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

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_{RMS}	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 $T_L = 100^\circ\text{C}$	$I_{F(AV)}$	2.0							Amps	
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) $T_L = 100^\circ\text{C}$	I_{FSM}	50							Amps	
Typical Thermal Resistance (NOTE 1)	$R_{\theta JA}$	53							$^\circ\text{C}/\text{W}$	
	$R_{\theta JL}$	16								
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$	
Maximum Instantaneous Forward Voltage at 1.5A	V_F	1.15							Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	I_R	5.0							μA
	$T_A = 125^\circ\text{C}$		125							
Typical Reverse Recovery Time at $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$,	T_{rr}	2.0							μs	
Typical junction capacitance at 4.0V, 1MHz	C_J	30							pF	

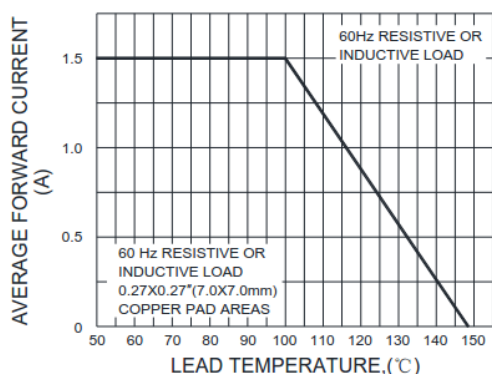
1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 0.3x0.3" (8.0 x 8.0mm) copper pad areas.

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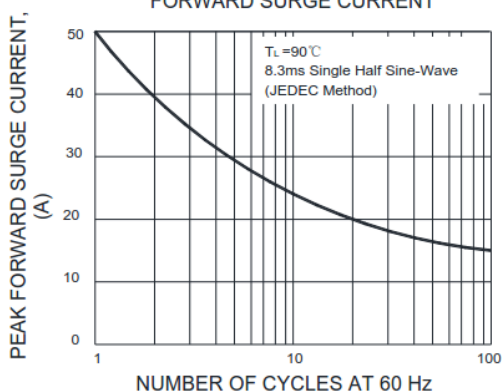
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RATINGS AND CHARACTERISTIC CURVES

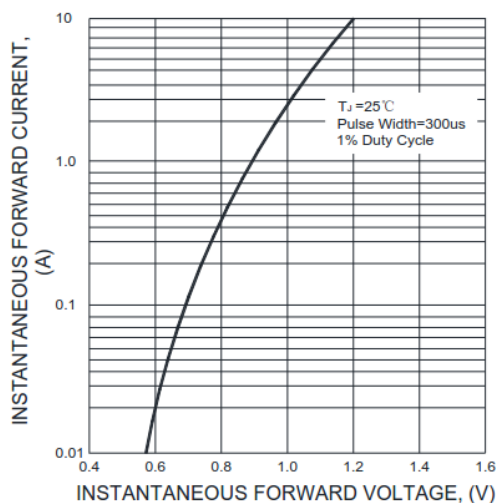
F1G.1-FORWARD CURRENT DERATING CURVE



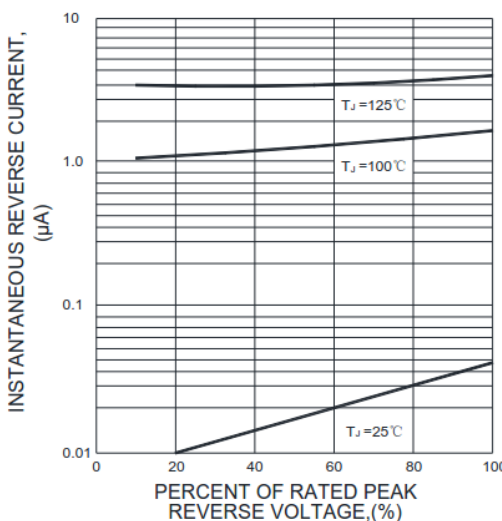
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



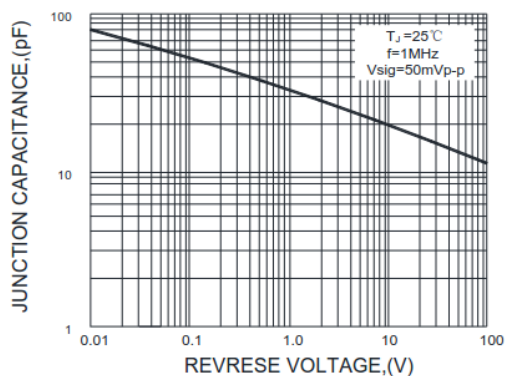
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice.