

GS2AA THRU GS2MA

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Ampere

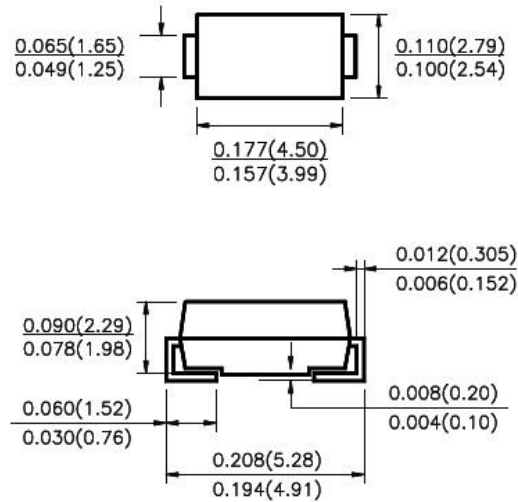
FEATURES

- ◆ 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

Mechanical Data

- ◆ Case: JEDED DO-214AC molded plastic over glass passivated chip
- ◆ Terminals: Solder plated, solderable per MIL-STD-750, method 2026
- ◆ Polarity: Color band denotes cathode end

DO-214AC (SMA)



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%

	SYMBOLS	GS2AA	GS2BA	GS2DA	GS2GA	GS2JA	GS2KA	GS2MA	UNIT
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							°C/W
	$R_{\theta JL}$	16							
Operating junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°C

ELECTRICAL CHARACTERISTICS

	SYMBOLS	GS2AA	GS2BA	GS2DA	GS2GA	GS2JA	GS2KA	GS2MA	UNIT
Maximum Instantaneous Forward Voltage at 1.5A	V_F	1.10							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	5.0							uA
	$T_A = 125^\circ\text{C}$	200							
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}	2.5							us
Typical junction capacitance at 4.0V, 1MHz	C_J	30							pF

Note: 1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with $0.3 \times 0.3''$ ($8.0 \times 8.0\text{mm}$) copper pad areas

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RATING AND CHARACTERISTIC CURVES GS2AA THRU GS2MA

FIG.1-FORWARD CURRENT DERATING CURVE

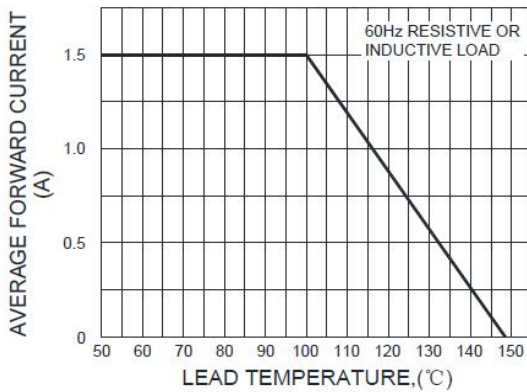


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

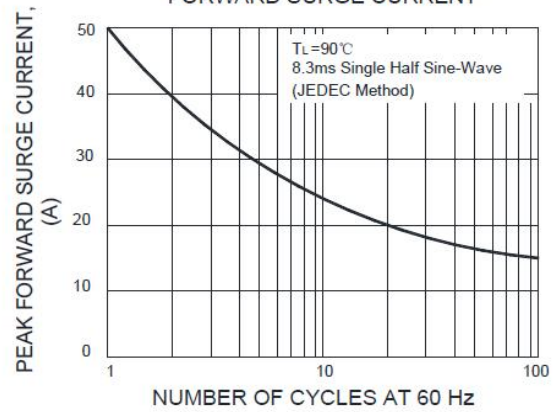


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

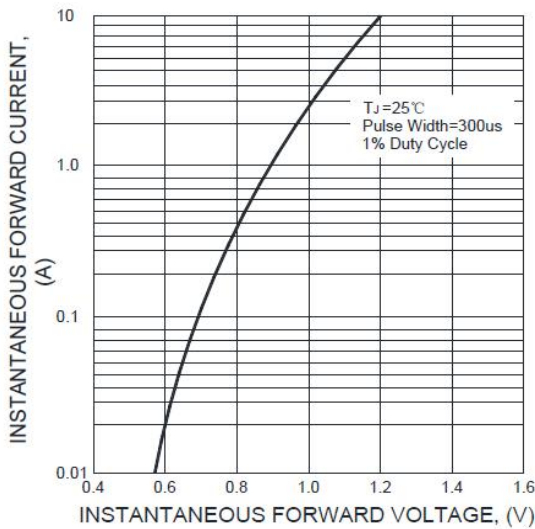


FIG.4-TYPICAL REVERSE CHARACTERISTICS

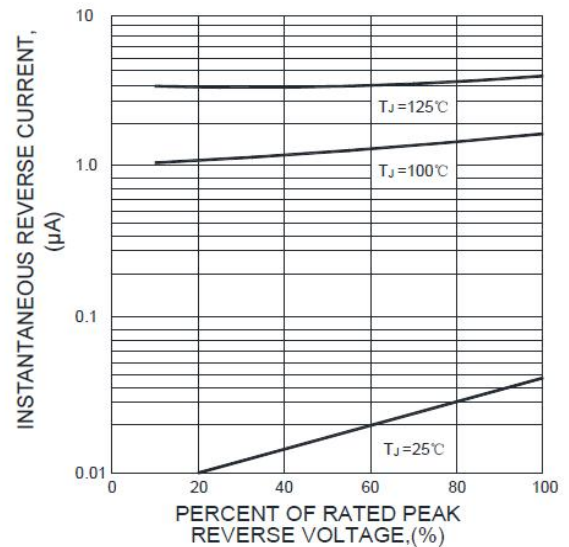
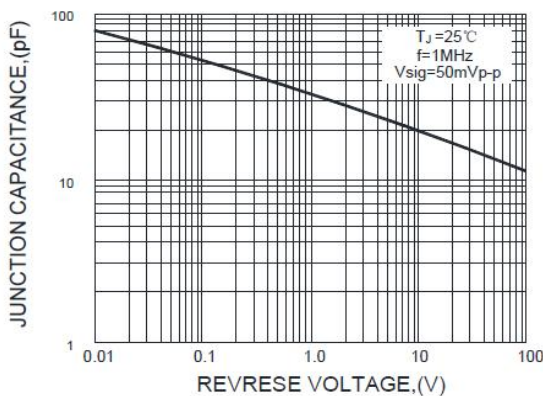


FIG.5-TYPICAL JUNCTION CAPACITANCE



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