



# **General Standard Diodes**

GS5AB~GS5MB 5.0A 50 to 1000V DO-214AA(SMB)

#### **Features**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ♦ Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- ♦ High temperature soldering guaranteed 250°C/10 seconds at terminals

#### **Mechanical Data**

◆ Case : Molded plastic body

◆ Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

♦ Weight : 0.0035 ounce, 0.098 grams



### Maximum Ratings and Electrical Characteristics ( $T_A = 25^{\circ}$ C unless otherwise noted)

Ratings at 25  $^{\circ}$ C ambient temperature unless otherwise specified. Single phase half wave 60Hz, resistive or inductive load. For capacitive load current derate by 20%.

Parameter	Symbol	GS5AB	GS5BB	GS5DB	GS5GB	GS5JB	GS5KB	GS5MB	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>(AV)</sub>	5.0				Α			
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	150				Α			
Maximum instantaneous forward voltage at 5.0A	V <sub>F</sub>	1.1			V				
	- I <sub>R</sub>	5 500				μА			
Typical junction capacitance (Note 1)	CJ	50			pF				
Typical thermal resistance	R <sub>qJA</sub>	85			°C/W				
Operating junction and storage temperature range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150			$^{\circ}$				

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.





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## **Typical Characteristic Curves**

Fig. 1. Derating Curve Output Rectified Current

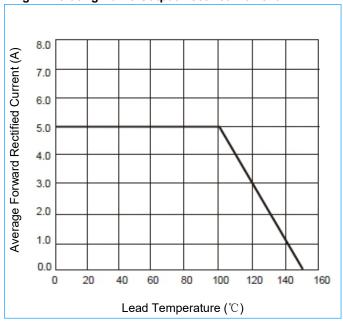


Fig. 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

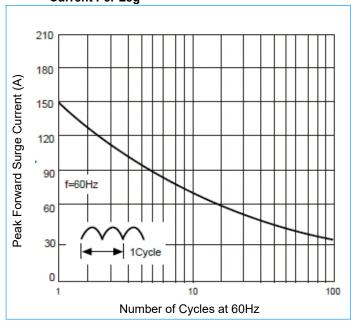


Fig. 3. Typical Forward Voltage Characteristics

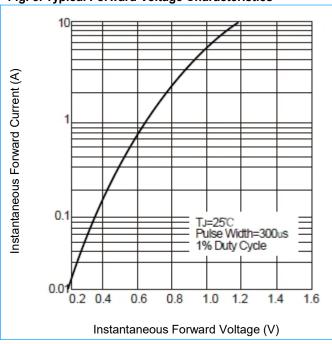
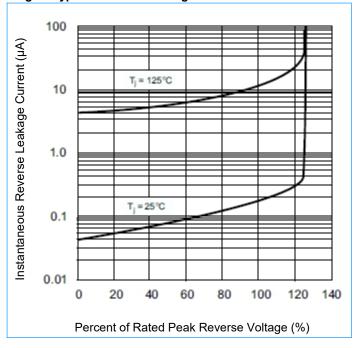


Fig. 4. Typical Reverse Leakage Characteristics



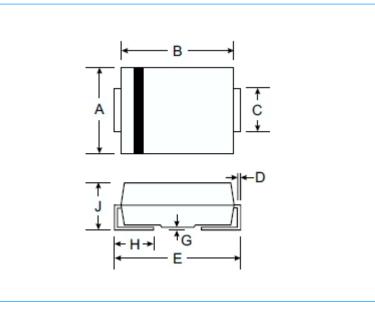




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### DO-214AA(SMB) Package Outline (Unit: mm)



Dim	Min	Max		
Α	3.30	3.94		
В	4.06	4.57		
С	1.85	2.20		
D	0.152	0.305		
E	5.00	5.59		
G	0.000	0.203		
Н	0.76	1.52		
J	2.10	2.50		

#### **Packaging Information**

Part Number	Component Package	Quantity			
GS5AB~GS5MB	DO-214AA(SMB)	3000 PCS/REEL			

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