



2A Surface Mount General Purpose Rectifiers

■ Features

- Low profile surface mounted application in order to optimize board space.
- · High current capability.
- High surge capability.
- Glass passivated chip junction inside.
- Suffix "G" indicates Halogen-free part, ex.GS2AG.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

■ Mechanical data

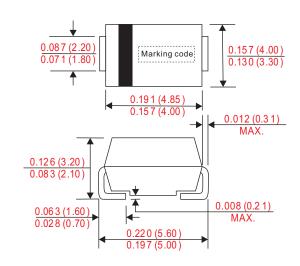
Epoxy:UL94-V0 rated flame retardant
 Case: Molded plastic, DO-214AA/SMB

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

Polarity: Indicated by cathode bandWeight: 0.003 ounce, 0.091 gram

Outline

SMB(DO-214AA)



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%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	at T _L = 110°C	Io			2.0	Α
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}		50	Α	
D	$V_R = V_{RRM} T_A = 25^{\circ}C$				5.0	uA
Reverse current	$V_R = V_{RRM} T_A = 125^{\circ}C$	I _R			100	
Thermal resistance	Junction to ambient	R _{eJA}		50		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C _J 30			pF	
Storage temperature		T _{STG}	-55		+150	°C

Symbol	Marking code	Max. repetitive peak reverse voltage V _{RRM} (V)	Max. RMS voltage V _{RMS} (V)	Max. DC blocking voltage V _R (V)	Max. forward voltage @2.0A, $T_A = 25^{\circ}C$ $V_F(V)$	Operating temperature T _J (°C)
GS2A	GS2A	50	35	50		
GS2B	GS2B	100	70	100		
GS2D	GS2D	200	140	200		
GS2G	GS2G	400	280	400	1.10	-55 ~ +150
GS2J	GS2J	600	420	600		
GS2K	GS2K	800	560	800		
GS2M	GS2M	1000	700	1000		

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■ Rating and characteristic curves

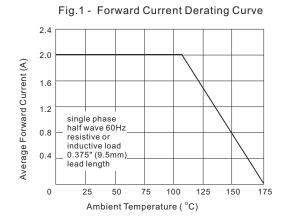
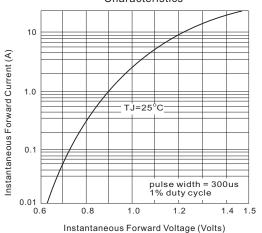


Fig. 2 - Maximum Non-Repetitive Peak
Forward Surge Current

60

(V)
50
30
10
10
Number of Cycles at 60 Hz

Fig. 3 - Typical Instantaneour Forward Characteristics



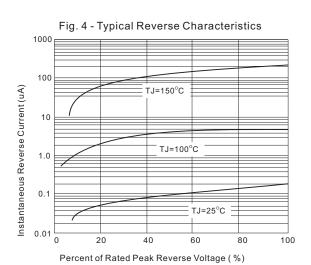
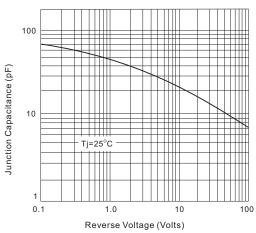


Fig. 5 - Typical Junction Capacitance



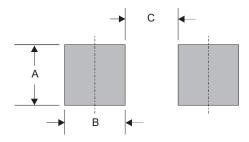
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■ SMB foot print



А	В	С	
0.091 (2.30)	0.098 (2.50)	0.071 (1.80)	

Dimensions in inches and (millimeters)

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