



# America Semiconductor

## Silicon Bridge Rectifier

### G2SB005 thru G2SB04

$V_{RRM} = 50\text{ V} - 1000\text{ V}$

$I_F = 2\text{ A}$

#### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-
- Types up to 1000 V  $V_{RRM}$
- Ideal for printed circuit board
- High surge current capability
- High temperature soldering guaranteed: 250°C/ 10 seconds, 0.375(9.5mm) lead length
- Glass passivated chip junction
- High case dielectric strength

#### Mechanical Data

Case: Molded plastic body over passivated junctions  
 Weight: 0.071 oz, 2 g  
 Mounting position: Any  
 Terminals: Plated leads, solderable per MIL-STD-750 Method 2026 guaranteed

#### GBL Package



#### Maximum ratings, at $T_j = 25\text{ °C}$ , unless otherwise specified

Parameter	Symbol	Conditions	G2SB005	G2SB01	G2SB02	G2SB04	Unit
Repetitive peak reverse voltage	$V_{RRM}$		50	100	200	400	V
RMS reverse voltage	$V_{RMS}$		35	70	140	280	V
DC blocking voltage	$V_{DC}$		50	100	200	400	V
Continuous forward current	$I_F$	$T_C \leq 25\text{ °C}$	2	2	2	2	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	80	80	80	80	A
Operating temperature	$T_j$		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	$T_{stg}$		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C

#### Electrical characteristics, at $T_j = 25\text{ °C}$ , unless otherwise specified

Parameter	Symbol	Conditions	G2SB005	G2SB01	G2SB02	G2SB04	Unit
Diode forward voltage	$V_F$	$I_F = 1\text{ A}$ , $T_j = 25\text{ °C}$	1.05	1.05	1.05	1.05	V
Reverse current	$I_R$	$V_R = 50\text{ V}$ , $T_j = 25\text{ °C}$ $V_R = 50\text{ V}$ , $T_j = 125\text{ °C}$	5 500	5 500	5 500	5 500	$\mu\text{A}$

#### Thermal characteristics

Parameter	Symbol	Conditions	G2SB005	G2SB01	G2SB02	G2SB04	Unit
Thermal resistance, junction - case	$R_{thJA}$		40.0	40.0	40.0	40.0	°C/W
	$R_{thJL}$		12.0	12.0	12.0	12.0	





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