



**America Semiconductor**

**Silicon Bridge Rectifier**

**GBU10A thru GBU10G**

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

**$I_F = 10\text{ A}$**

**Features**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Types up to 1000 V  $V_{RRM}$
- Ideal for printed circuit board
- High surge overload rating
- High temperature soldering guaranteed: 260°C/ 10 seconds, 0.375(9.5mm) lead length
- Glass passivated chip junction
- High case dielectric strength 1500  $V_{RMS}$

**Mechanical Data**

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

**GBU Package**



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

Parameter	Symbol	Conditions	GBU10A	GBU10B	GBU10D	GBU10G	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	$I_F$	$T_C \leq 100\text{ °C}$	10	10	10	10	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	220	220	220	220	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	GBU10A	GBU10B	GBU10D	GBU10G	Unit
Diode forward voltage	$V_F$	$I_F = 10\text{ A}$ , $T_j = 25\text{ °C}$	1.1	1.1	1.1	1.1	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**

Thermal resistance, junction - case	$R_{thJC}$		2.2	2.2	2.2	2.2	°C/W
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