

Single Phase Glass Passivated Silicon Bridge Rectifier

$V_{RRM} = 600 \text{ V -} 1000 \text{ V}$
 $I_o = 15 \text{ A}$

Features

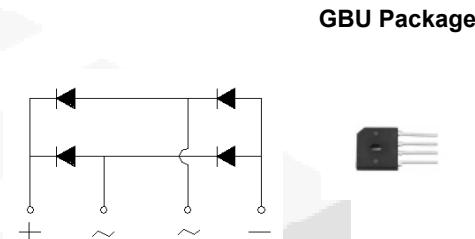
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500 V_{RMS}
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge overload rating
- High temperature soldering guaranteed: 260°C/ 10 seconds, 0.375 (9.5mm) lead length
- Not ESD Sensitive

Mechanical Data

Case: Molded plastic body over passivated junctions

Terminals: Plated leads, solderable per MIL-STD-750 Method 2026.

Mounting position: Any



GBU Package



Maximum ratings at $T_c = 25 \text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	GBU15J	GBU15K	GBU15M	Unit
Repetitive peak reverse voltage	V_{RRM}		600	800	1000	V
RMS reverse voltage	V_{RMS}		420	560	700	V
DC blocking voltage	V_{DC}		600	800	1000	V
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

Electrical characteristics at $T_c = 25 \text{ }^\circ\text{C}$, unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load.

For capacitive load derate current by 20%.

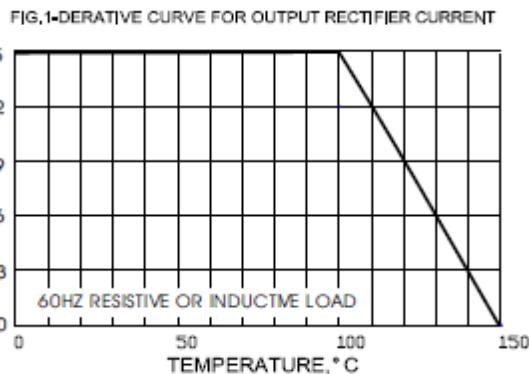
Parameter	Symbol	Conditions	GBU15J	GBU15K	GBU15M	Unit
Maximum average forward rectified current ^{1,2}	I_o	$T_c = 100 \text{ }^\circ\text{C}$	15.0	15.0	15.0	A
Peak forward surge current	I_{FSM}	$t_p = 8.3 \text{ ms, half sine}$	240	240	240	A
Maximum instantaneous forward voltage drop per leg	V_F	$I_F = 15 \text{ A}$	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage per leg	I_R	$T_a = 25 \text{ }^\circ\text{C}$ $T_a = 125 \text{ }^\circ\text{C}$	5 500	5 500	5 500	μA
Typical junction capacitance per leg ³	C_j		80	80	80	pF
Typical thermal resistance per leg ^{1,2}	$R_{\theta JC}$		2.2	2.2	2.2	$^\circ\text{C/W}$

¹ - Device mounted on 100 mm x 100 mm x 1.6 mm Cu plate heatsink

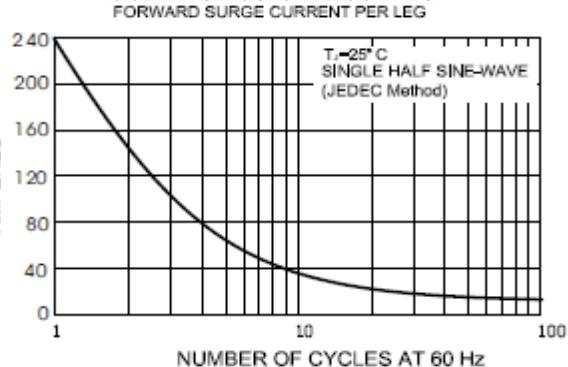
² - Recommended mounted position is to bolt down device on a heatsink with silicon thermal compound for maximum heat transfer using #6 screw.

³ - Measured at 1.0 MHz and applied reverse bias of 4.0 V

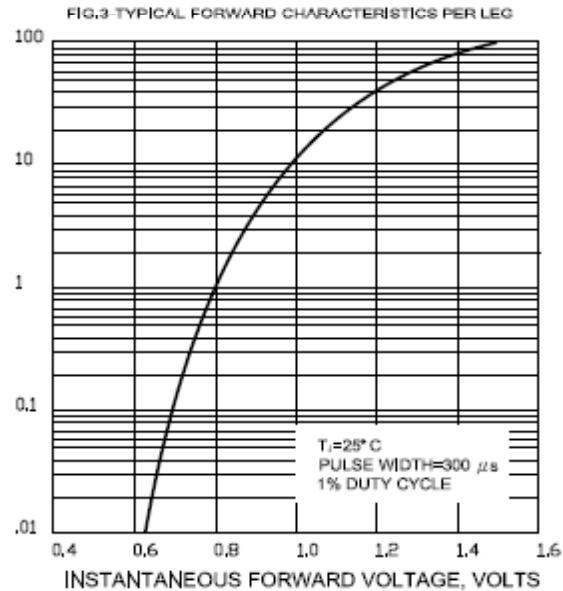
AVERAGE FORWARD OUTPUT CURRENT,
AMPERES



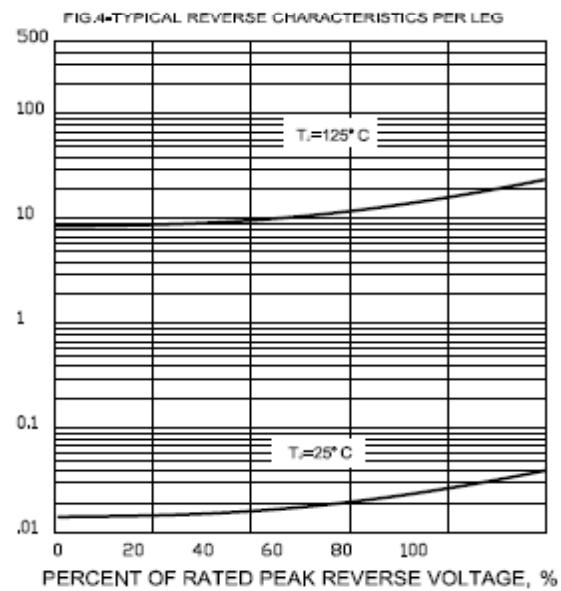
PEAK FORWARD SURGE CURRENT,
AMPERES



INSTANTANEOUS FORWARD CURRENT, AMPERES

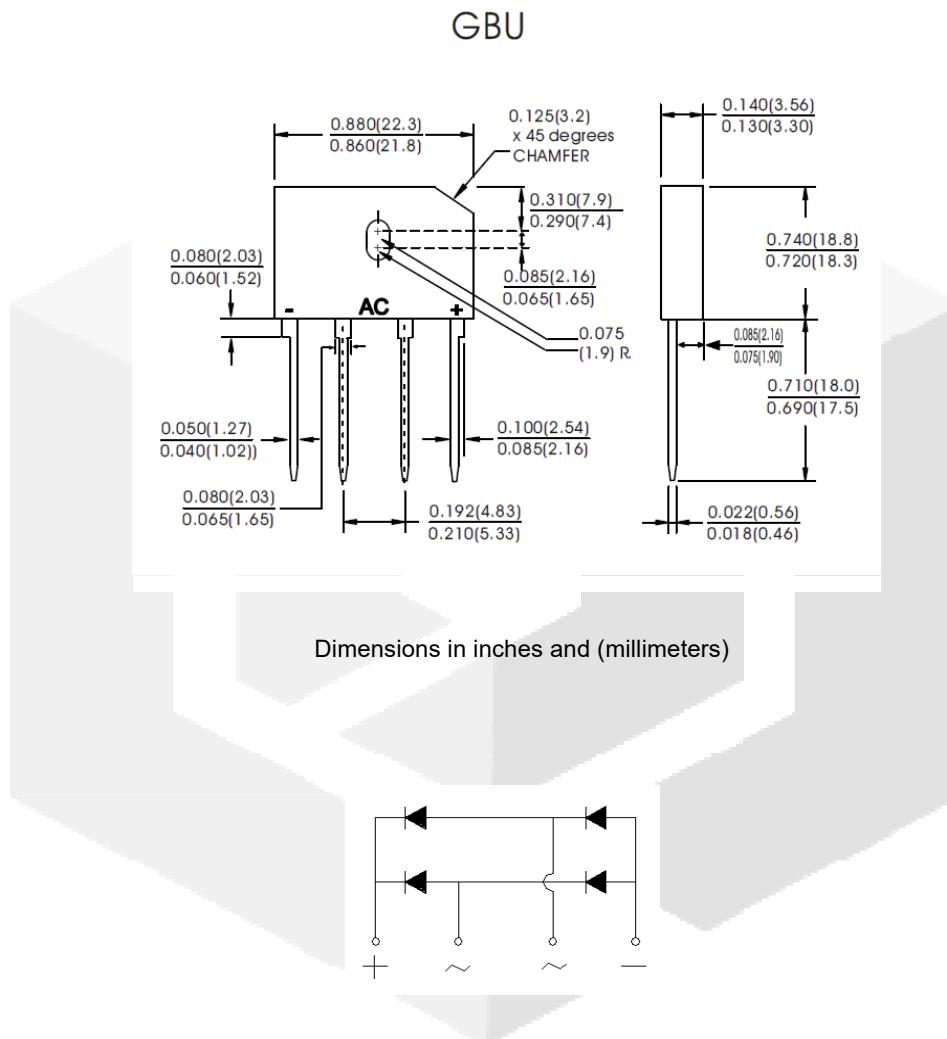


INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



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