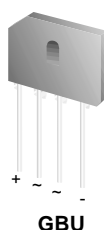


# GBU8A - GBU8M

## Bridge Rectifiers

### Features

- Glass passivated junction
- Surge overload rating: 200 amperes peak
- Reliable low cost construction utilizing molded plastic technique.
- Ideal for printed circuit board.



### Absolute Maximum Ratings \* T<sub>a</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value							Units
		8A	8B	8D	8G	8J	8K	8M	
V <sub>RRM</sub>	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V <sub>RMS</sub>	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V <sub>R</sub>	DC Reverse Voltage (Rated V <sub>R</sub> )	50	100	200	400	600	800	1000	V
I <sub>F(AV)</sub>	Average Rectified Forward Current, @ T <sub>A</sub> = 100°C @ T <sub>A</sub> = 45°C	8.0							A
		6.0							A
I <sub>FSM</sub>	Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	200							A
T <sub>STG</sub>	Storage Temperature Range	-55 to +150							°C
T <sub>J</sub>	Operating Junction Temperature	-55 to +150							°C

\* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### Thermal Characteristics

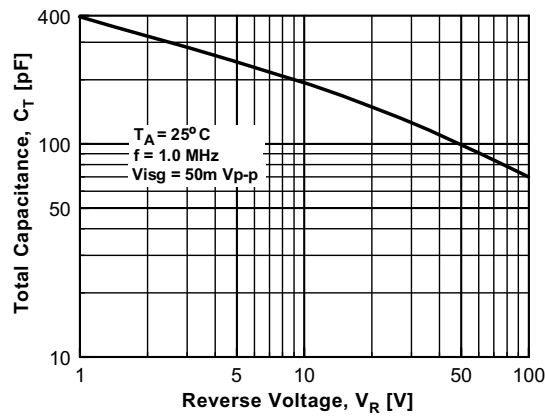
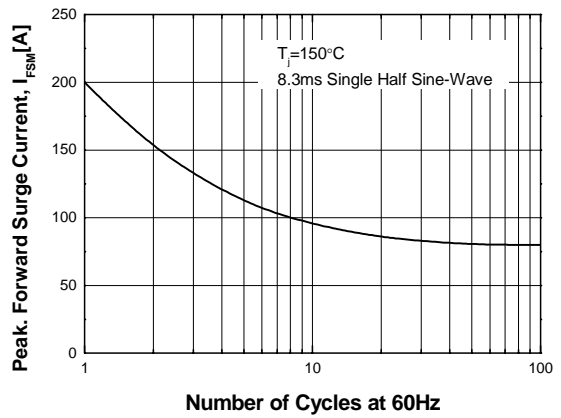
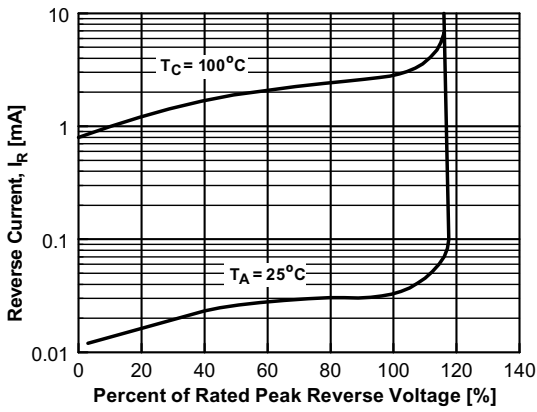
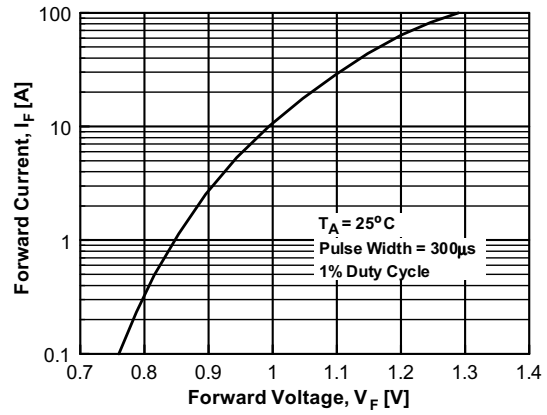
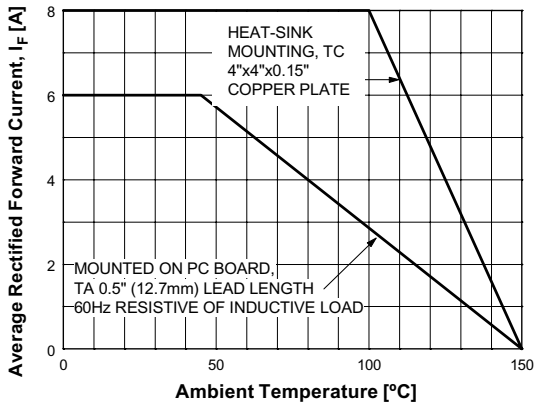
Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	16	W
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient, * per leg	18	°C/W
R <sub>θJC</sub>	Thermal Resistance, Junction to Case, * per leg	3	°C/W

\* Device mounted on PCB with 0.5 × 0.5" (12 × 12mm).

### Electrical Characteristics T<sub>C</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>F</sub>	Forward Voltage, per element @ 8.0A	1.0	V
I <sub>R</sub>	Reverse Current, per element @ Rated V <sub>R</sub> T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	50	μA
		500	μA
	I <sup>2</sup> t Rating for Fusing t < 8.35ms	166	A <sup>2</sup> s

### Typical Performance Characteristics



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FACT™	ImpliedDisconnect™	OCXPro™	RapidConnect™	UHC™
FACT Quiet Series™		OPTOLOGIC <sup>®</sup>	μSerDes™	UltraFET <sup>®</sup>
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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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