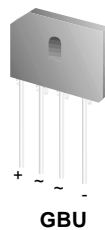


GBU8A - GBU8M

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_a = 25°C unless otherwise noted

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

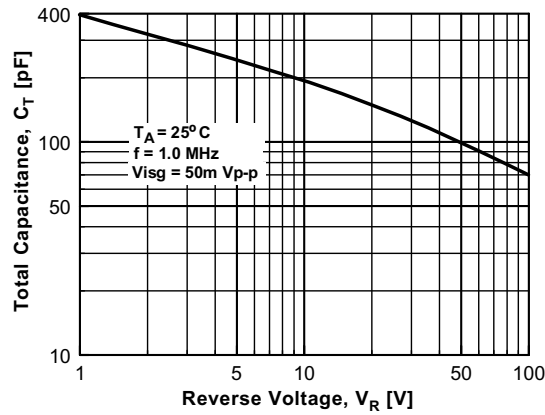
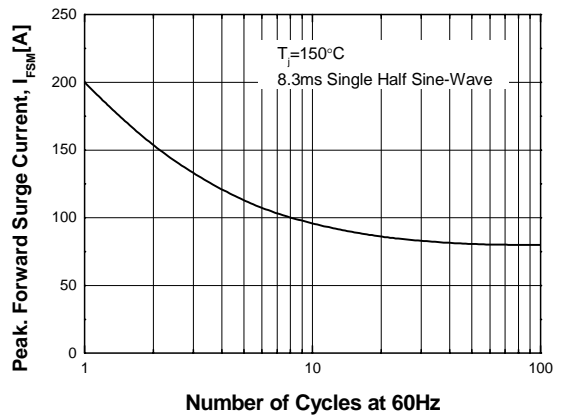
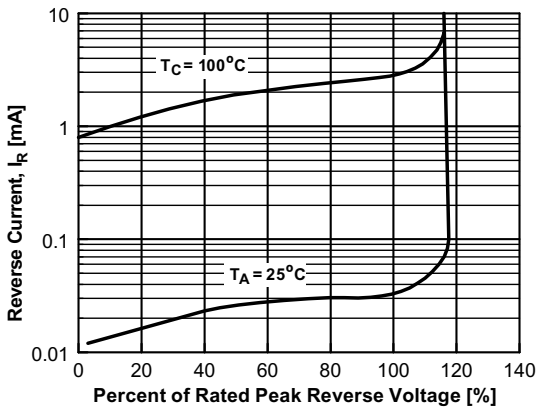
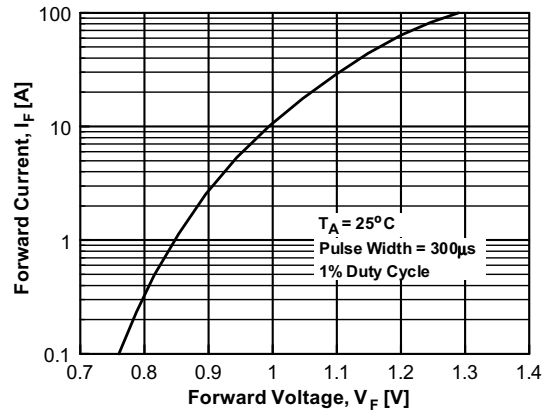
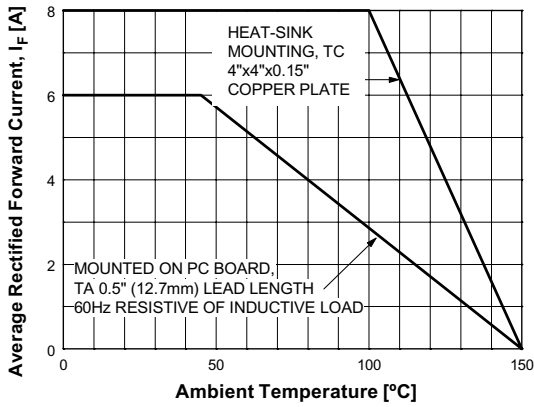
Symbol	Parameter	Value	Units
P _D	Power Dissipation	16	W
R _{θJA}	Thermal Resistance, Junction to Ambient, * per leg	18	°C/W
R _{θJC}	Thermal Resistance, Junction to Case, * per leg	3	°C/W

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

Electrical Characteristics T_C = 25°C unless otherwise noted

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

Typical Performance Characteristics



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FACT Quiet Series™		OPTOLOGIC [®]	μSerDes™	UltraFET [®]
Across the board. Around the world.™		OPTOPLANAR™	SILENT SWITCHER [®]	UniFET™
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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