

Single Phase Glass Passivated Silicon Bridge Rectifier

$V_{RRM} = 600\text{ V}$
 $I_O = 8\text{ A}$

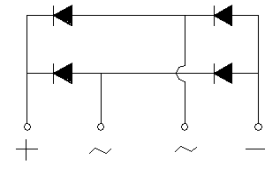
Features

- 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 $T_c = 25\text{ °C}$, unless otherwise specified

Parameter	Symbol	Conditions	GBU8J	GBU8K	GBU8M
Repetitive peak reverse voltage	V_{RRM}		600	800	1000
RMS reverse voltage	V_{RMS}		420	560	700
DC blocking voltage	V_{DC}		600	800	1000
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150

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

Single phase, half sine wave, 60 Hz, resistive or inductive load.
 For capacitive load derate current by 20%.

Parameter	Symbol	Conditions	GBU8J	GBU8K	GBU8M
Maximum average forward rectified current ^{1,2}	I_O	$T_c = 100\text{ °C}$	8.0	8.0	8.0
Peak forward surge current	I_{FSM}	$t_p = 8.3\text{ ms}$, half sine	200	200	200
Maximum instantaneous forward voltage drop per leg	V_F	$I_F = 8\text{ A}$	1.1	1.1	1.1
Maximum DC reverse current at rated DC blocking voltage per leg	I_R	$T_a = 25\text{ °C}$ $T_a = 125\text{ °C}$	5 500	5 500	5 500
Rating for fusing	I^2t	$t < 8.3\text{ ms}$	166	166	166
Typical junction capacitance per leg ³	C_j		94	94	94
Typical thermal resistance per leg ^{1,2}	$R_{\theta JA}$ $R_{\theta JL}$		21 2.2	21 2.2	21 2.2

¹ - Device mounted on 82 mm x 82 mm x 3 mm Al 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

U8M

1000 V



Unit

V

V

V

°C

°C

Unit

A

A

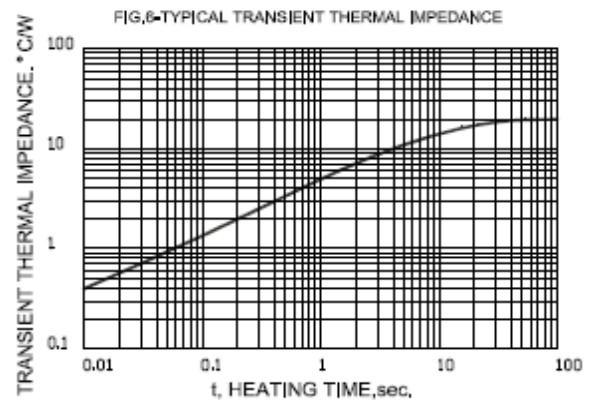
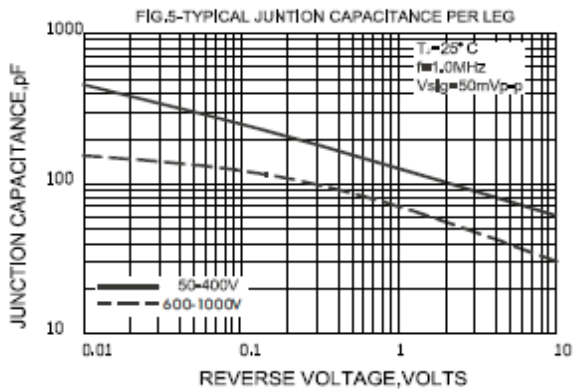
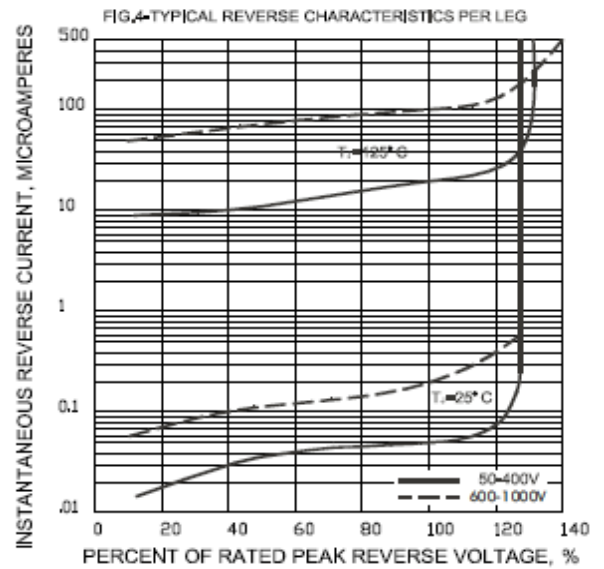
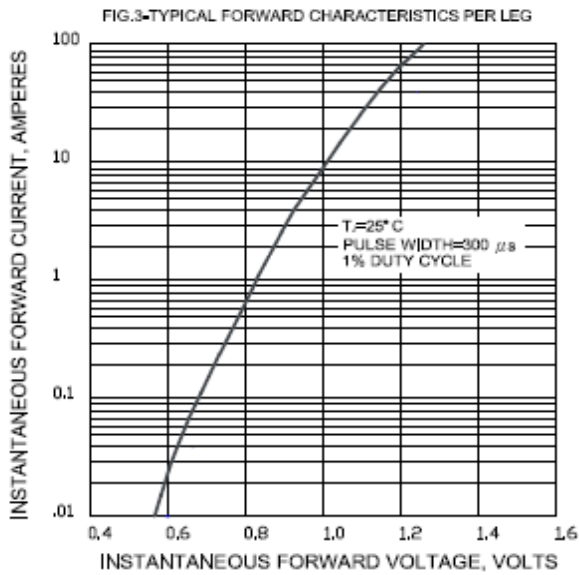
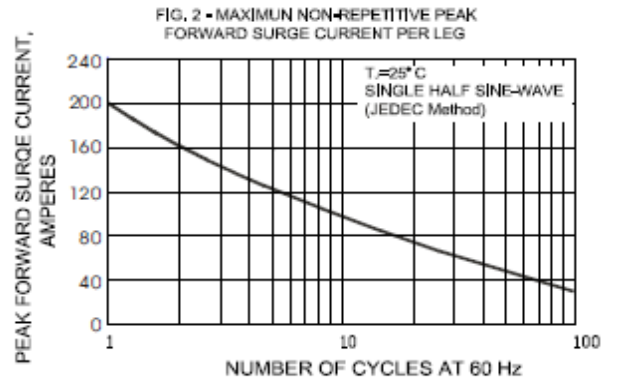
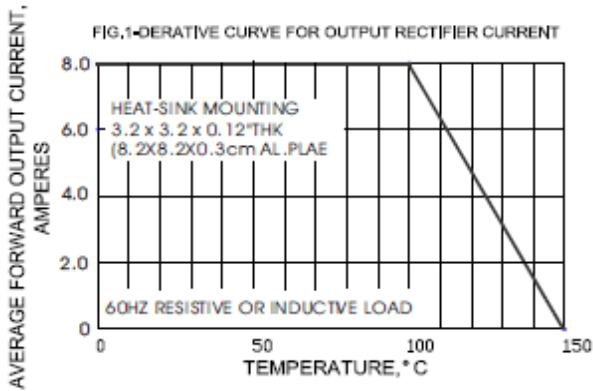
V

μA

A²sec

pF

°C/W



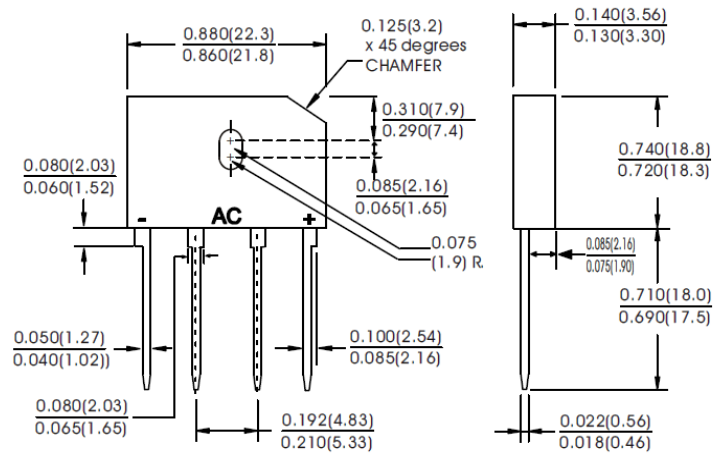
U8M



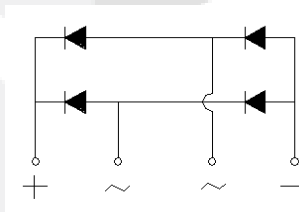
Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

GBU



Dimensions in inches and (millimeters)



U8M



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[GeneSiC Semiconductor:](#)

[GBU8J](#)