

VOLTAGE RANGE: 50 - 800V

CURRENT: 6.0 A

Features

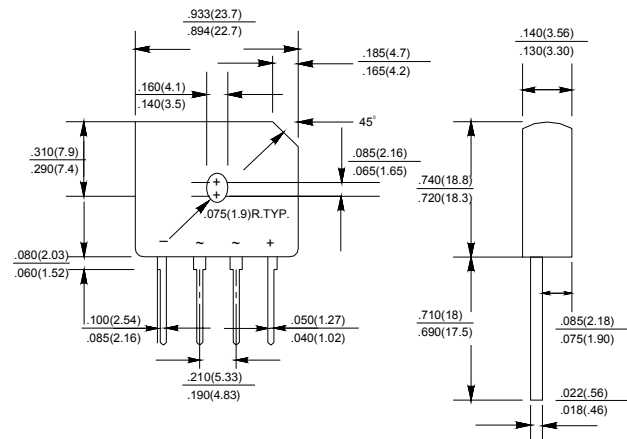
- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 4.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



GBU



Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

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

Characteristic	Symbol	GBU6A	GBU6B	GBU6D	GBU6G	GBU6J	GBU6K	Unit
Peak Repetitive Reverse Voltage	V _{RRM}							
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	V
DC Blocking Voltage	V _R							
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	V
Average Rectified Output Current @T _C = 100°C	I _O	6.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	175						A
I ² t Rating for Fusing (t < 8.35ms)	I ² t	127						A ² s
Forward Voltage (per element) @I _F = 6.0A	V _{FM}	1.0						V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _C = 100°C	I _R	5.0 500						μA
Typical Thermal Resistance (per leg) (Note 1)	R _{θJA}	8.6						K/W
Typical Thermal Resistance (per leg) (Note 2)	R _{θJC}	3.1						K/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150						°C

Note: 1. Thermal resistance junction to ambient, mounted on PCB at 9.5mm lead length with 12mm² copper pads.

2. Thermal resistance junction to case, mounted on 6.5 x 3.5 x 0.15cm thick AL plate.

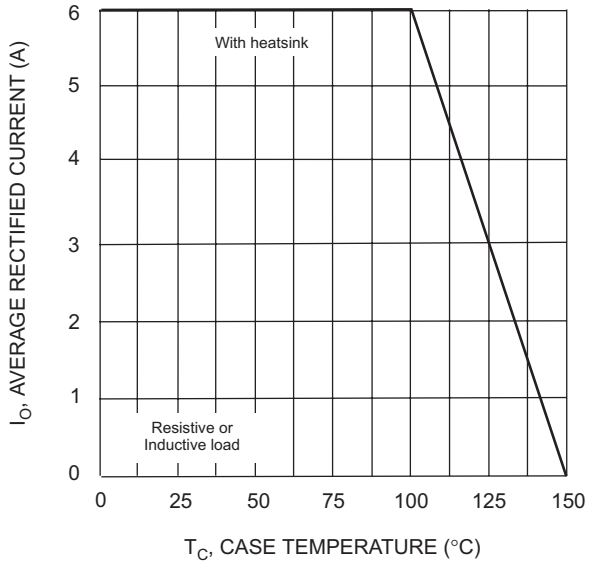


Fig. 1 Forward Current Derating Curve

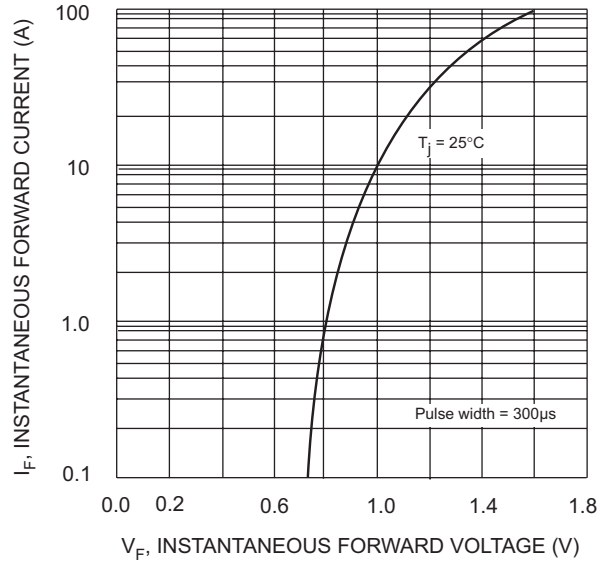


Fig. 2 Typical Forward Characteristics, per element

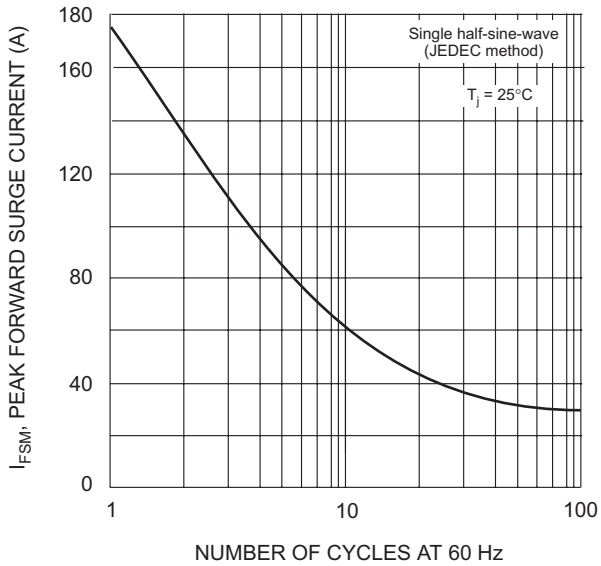


Fig. 3 Maximum Non-Repetitive Surge Current

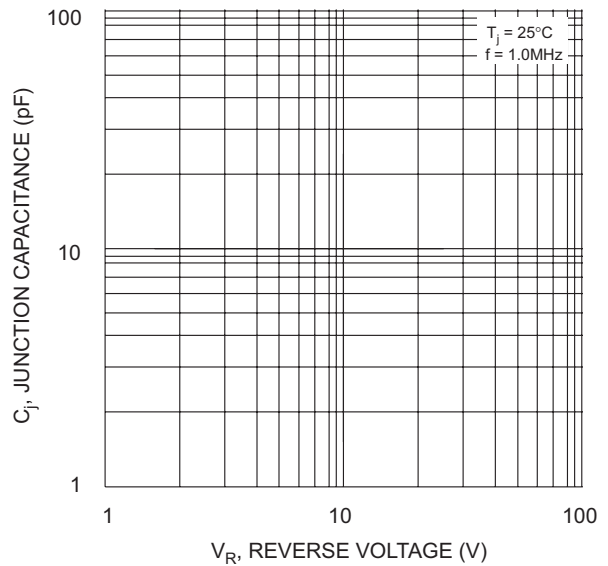


Fig. 4 Typical Junction Capacitance