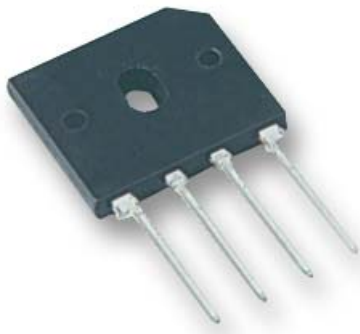


GBU6 Series

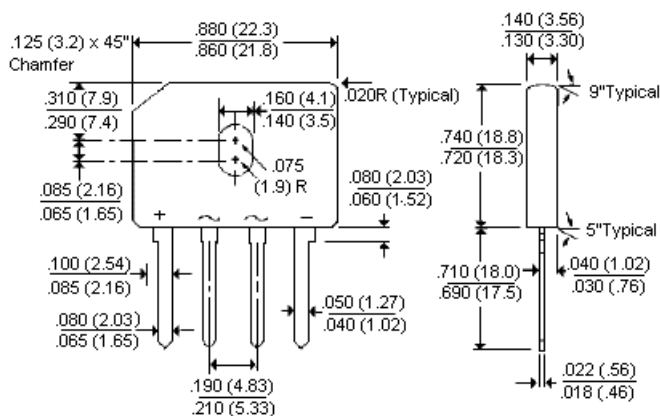
Single Phase Bridge Rectifiers



Features:

- Glass passivated devices offer greater reliability at higher operating temperatures and improved moisture resistance capability.
- Ideal for printed circuit board.
- Surge overload rating: 175 Amperes peak.
- High temperature soldering guaranteed:
260°C/10 seconds/0.375" (9.5mm) lead length at 5lbs (2.3kg) tension.

GBU



Dimensions : Inches (Millimetres)

Mechanical Data:

- Case : Reliable low cost construction utilizing moulded plastic technique.
- Terminals : Leads solderable per MIL-STD-202, Method 208
- Mounting position : Any
- Mounting torque : 5 in. lb. Maximum.
- Weight : 0.15 ounce, 4.0 grams.

Body		
Height	Width	Depth
18.8	22.3	3.56

Maximum Ratings and Electrical Characteristics:

Rating at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load, 60Hz.

For Capacitive load derate current by 20%.

Parameter	GBU6B	GBU6J	GBU6K	Units
Maximum recurrent peak reverse voltage	100	600	800	V _{RRM}
Maximum RMS input voltage	70	420	560	V _{RMS}
Maximum DC blocking voltage	100	600	800	V _{DC}
Maximum average forward rectified output current at T _C = 100°C	6.0			A _(AV)



GBU6 Series

Single Phase Bridge Rectifiers



Parameter	GBU6B	GBU6J	GBU6K	Units
I ² t Rating for fusing (t<8.3ms)	127			A ² Seconds
Peak forward surge current single sine-wave superimposed on rated load (JEDEC method)	175			A _{PK}
Maximum instantaneous forward voltage drop per element at 6.0A	1.0			V _{PK}
Maximum reverse leakage at rated DC blocking voltage per element	T _A = 25°C T _C = 100°C	5.0 500		μA
Typical thermal resistance per leg (Note 2) RθJA Typical thermal resistance per leg (Note 3) RθJL		8.6 3.1		°C/W
Operating and Storage temperature range, T _J , T _{STG}	-55 to +150			°C

Notes:

1. Recommended mounting position is to bolt down on to a heatsink with silicone thermal compound for maximum heat transfer with a number 6 screw.
2. Units Mounted in free air, no heatsink, PCB at 0.375" (9.5mm) lead length with 0.5" x 0.5" (12 x 12mm) copper pads.
3. Units Mounted on a 2.6" x 1.4" x 0.06" thick (6.5 x 3.5 x 0.15cm) Aluminium plate.

Rating and Characteristics Curves

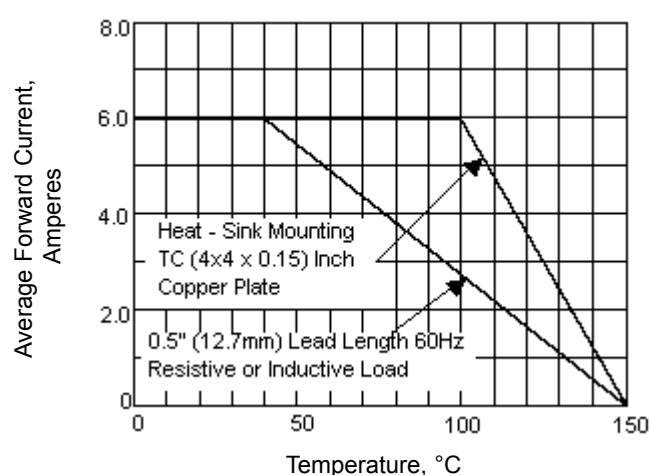


Figure - 1 Derating Curve for Output Rectified Current

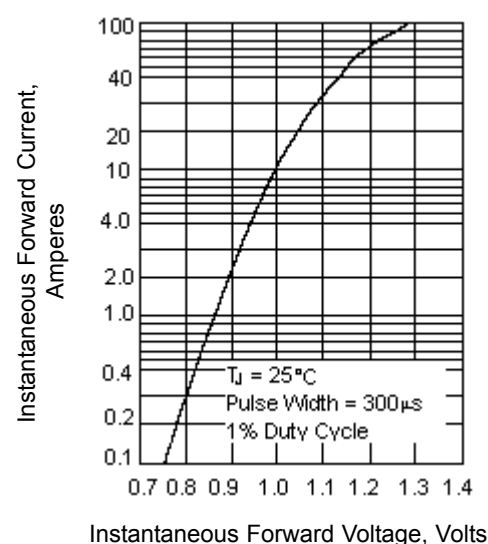


Figure - 2 Typical Instantaneous Forward Characteristics per Element

GBU6 Series

Single Phase Bridge Rectifiers

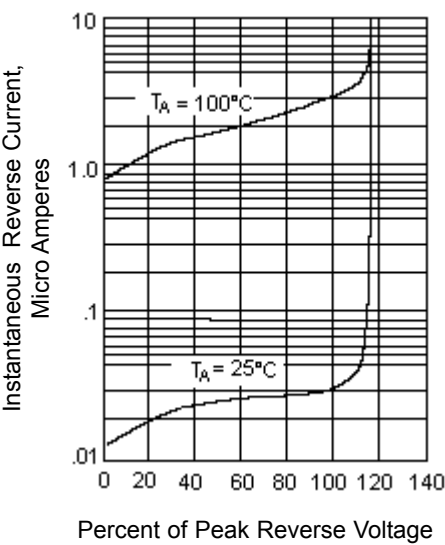


Figure - 3 Typical Reverse Characteristics

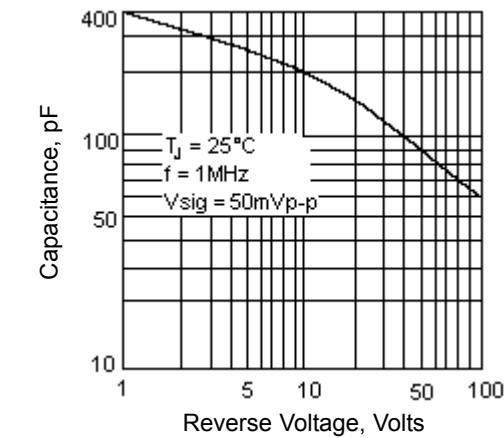


Figure - 5 Typical Junction Capacitance per Element

Specifications

V_{RRM} (V)	Maximum Input Voltage (V ac)	I_O at 40°C (A)	I_{FSM} (A)	Current Rating (A)	Part Number
100	70	6	175	6	GBU6B
600	420				GBU6J
800	560				GBU6K



GBU6 Series

Single Phase Bridge Rectifiers



Notes:

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