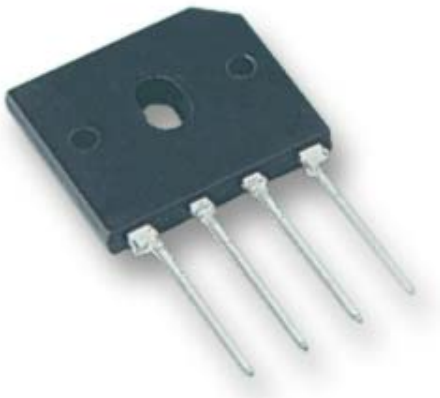


# GBU4 Series

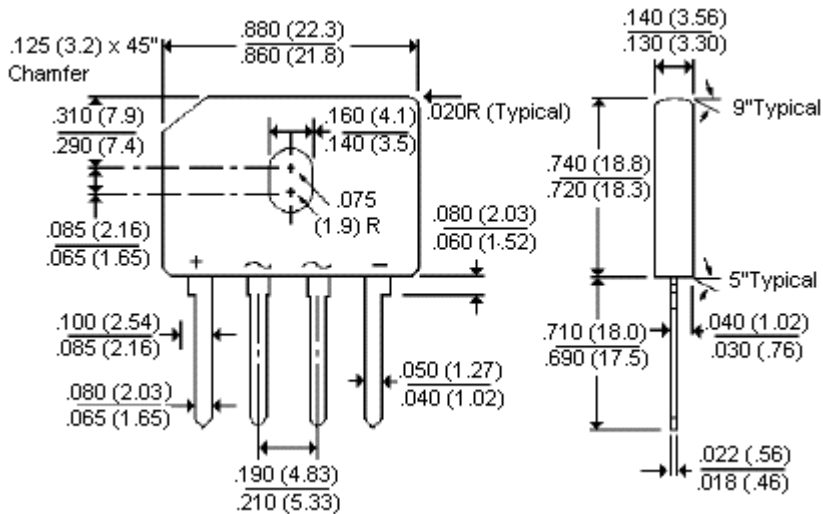
## Single Phase Bridge Rectifiers



### Features:

- Glass passivated device offer greater reliability at higher operating temperatures and improved moisture resistance capability.
- Ideal for printed circuit board.
- Reliable low cost construction utilizing moulded plastic technique.
- Surge overload rating : 150 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 : 5in. lb. Maximum.

# GBU4 Series

## Single Phase Bridge Rectifiers



### 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	GBU4B	GBU4D	GBU4K	Units
Maximum recurrent peak reverse voltage	100	200	800	$V_{RRM}$
Maximum RMS input voltage	70	140	560	$V_{RMS}$
Maximum DC blocking voltage	100	200	800	V dc
Maximum average forward Rectified output current at $T_C = 100^\circ\text{C}$ $T_A = 40^\circ\text{C}$		4.0 3.0		$A_{(AV)}$
$I^2t$ rating for fusing ( $t < 8.3\text{ms}$ )		93		$A^2\text{Sec}$
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)		150		$A_{PK}$
Maximum instantaneous forward voltage drop per element at 4.0A		1.0		$V_{PK}$
Maximum reverse leakage at rated $T_A = 25^\circ\text{C}$ DC blocking voltage per element $T_C = 100^\circ\text{C}$		5 500		$^\circ\text{CA}$
Typical thermal resistance per leg (Note 2) R $\theta$ JA (Note 3) R $\theta$ JL		19.0 4		$^\circ\text{C/W}$
Operating and Storage temperature range $T_J, T_{STG}$		-55 to +150		$^\circ\text{C}$

#### Notes:

1. Recommended mounting position is to bolt down on to a heatsink with silicone thermal compound for maximum heat transfer with 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 2.0 x 1.6" x 0.3" thick (5 x 4 x 0.8cm) Aluminium plate.

# GBU4 Series

## Single Phase Bridge Rectifiers



### Rating and Characteristic Curves

Figure 1 Derating Curve for Output Rectified Current

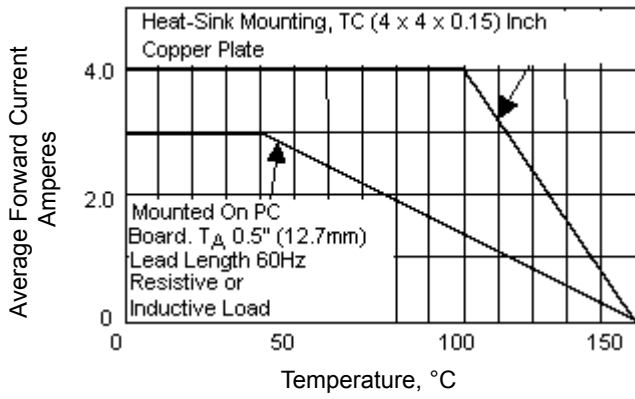


Figure 2 Typical Instantaneous Forward Characteristics per Element

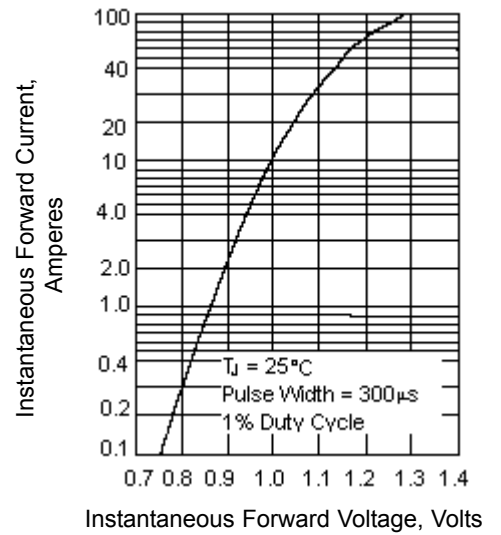


Figure 3 Typical Reverse Characteristics

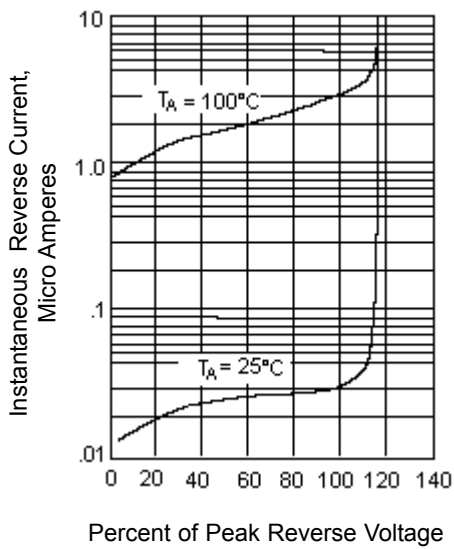
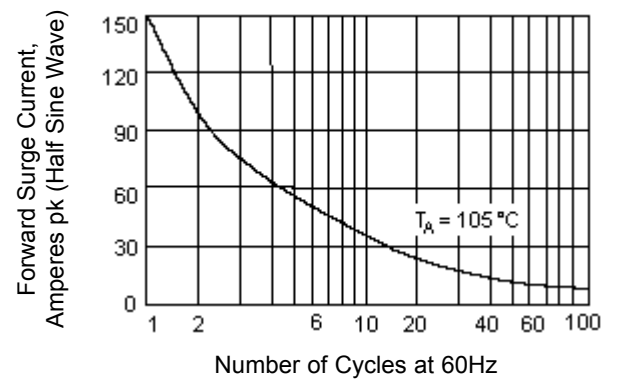


Figure 4 Maximum Non-Repetitive Peak Forward Surge Current

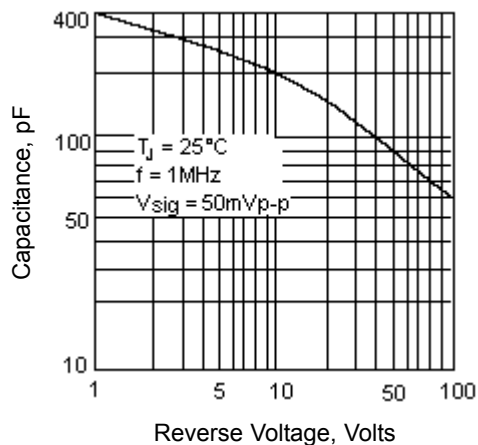


# GBU4 Series

## Single Phase Bridge Rectifiers



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)	Part Number
100	70	3	150	GBU4B
200	140			GBU4D
800	560			GBU4K

# GBU4 Series

## Single Phase Bridge Rectifiers



### Notes:

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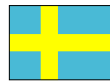
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