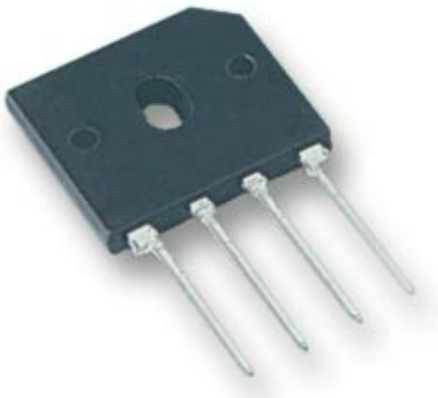


GBU4 Series

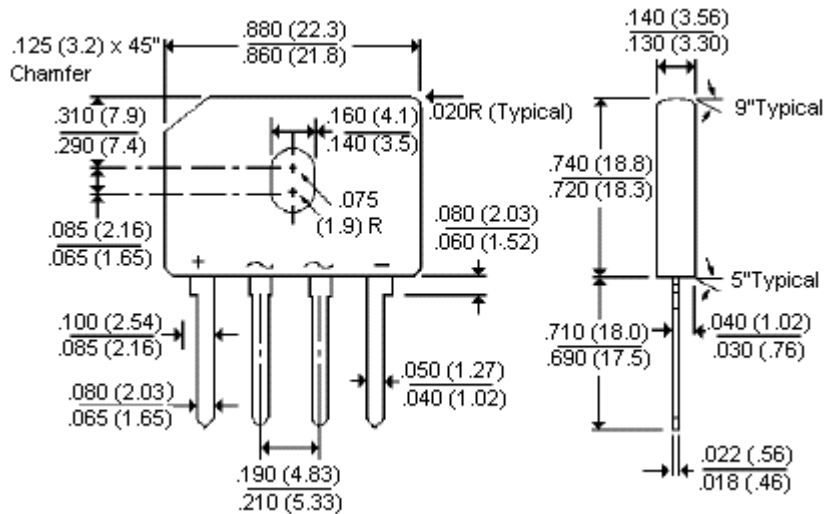
Single Phase Bridge Rectifiers



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 $T_C = 100^{\circ}C$ $T_A = 40^{\circ}C$	4.0 3.0			$A_{(AV)}$
I^2t rating for fusing ($t < 8.3ms$)	93			A^2Sec
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 $T_A = 25^{\circ}C$ DC blocking voltage per element $T_C = 100^{\circ}C$	5 500			$^{\circ}CA$
Typical thermal resistance per leg (Note 2) R θ JA (Note 3) R θ JL	19.0 4			$^{\circ}C/W$
Operating and Storage temperature range T_J, T_{STG}	-55 to +150			$^{\circ}C$

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

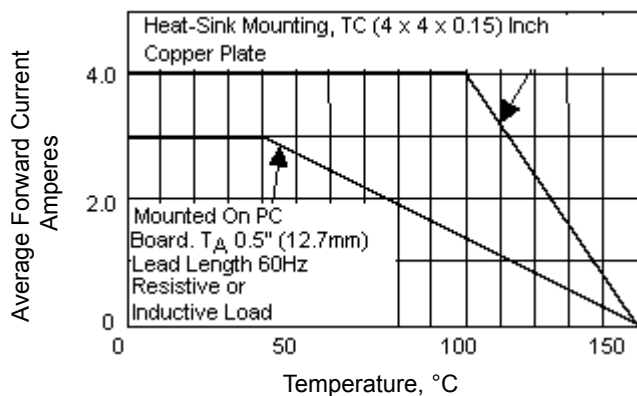


Figure 2 Typical Instantaneous Forward Characteristics per Element

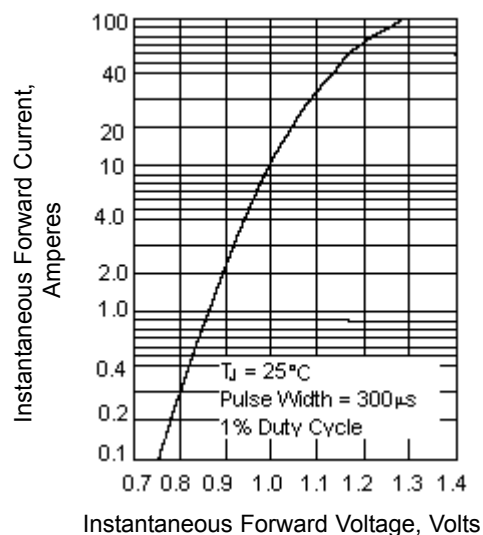


Figure 3 Typical Reverse Characteristics

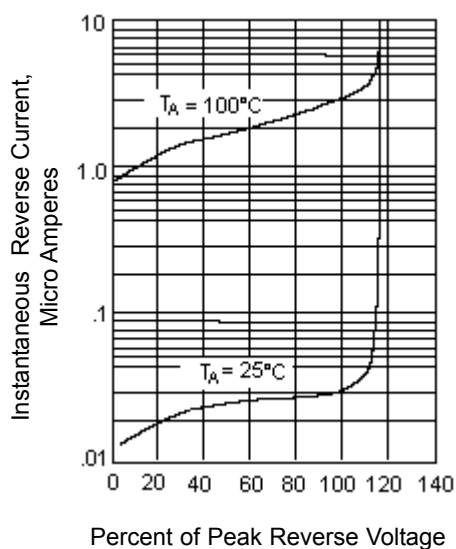
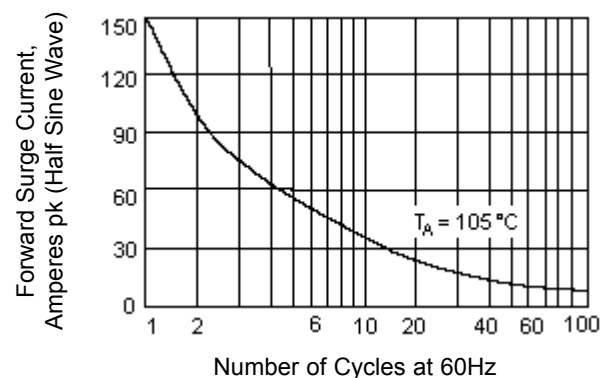


Figure 4 Maximum Non-Repetitive Peak Forward Surge Current

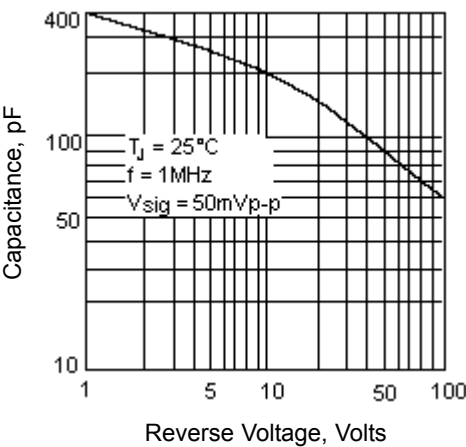


GBU4 Series

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



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