

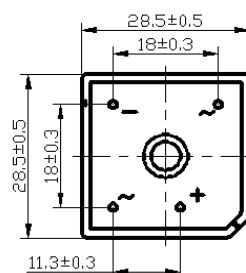
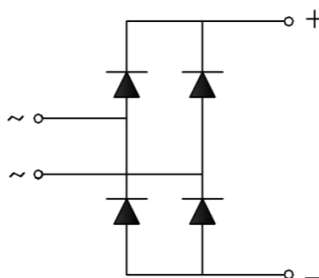
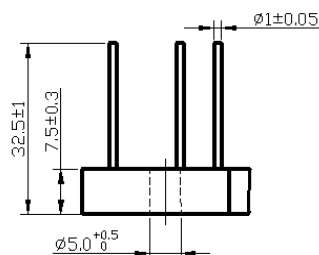
**REVERSE VOLTAGE:** 50 to 1000 VOLTS

**FORWARD CURRENT:** 50 AMPERE

GBPC-W

#### Features

- ◇ UL Recognized File # E-96005
- ◇ Glass passivated junction
- ◇ The plastic material used carries Underwriters Laboratory Flammability Recognition 94V-0
- ◇ Integrally molded heatsink provide very low thermal resistance for maximum heat dissipation
- ◇ Universal 4-way terminals; snap-on, wrap-around, solder or P.C. board mounting
- ◇ Surge overload ratings 400 amperes
- ◇ Terminals solderable per MIL-STD-202, Method 208
- ◇ Typical  $I_R$  less than 0.2 uA
- ◇ High temperature soldering guaranteed: 260°C / 10 seconds / .375", (9.5mm) lead lengths
- ◇ Isolated voltage from case to lead over 2500 volts



Dimensions in millimeters

#### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	Symbols	005	01	02	04	06	08	10	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_C=55^\circ C$	$I_{(AV)}$	50							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	450							Amp
Maximum Forward Voltage at 25A DC and 25°C	$V_F$	1.1							Volts
Maximum Reverse Current at $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=125^\circ C$	$I_R$	10.0 1000							uAmp
Typical Junction Capacitance (Note 1)	$C_J$	300							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2							°C/W
Operating and Storage Temperature Range	$T_J, T_{stg}$	-55 to +150							°C

#### NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal resistance from junction to case per leg

#### RATINGS AND CHARACTERISTIC CURVES

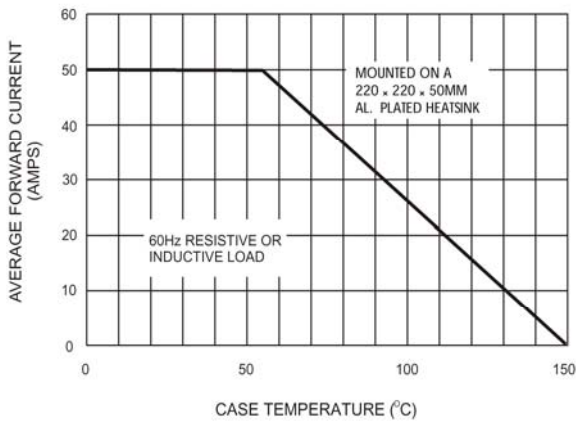


Figure 1. Forward Current Derating Curve

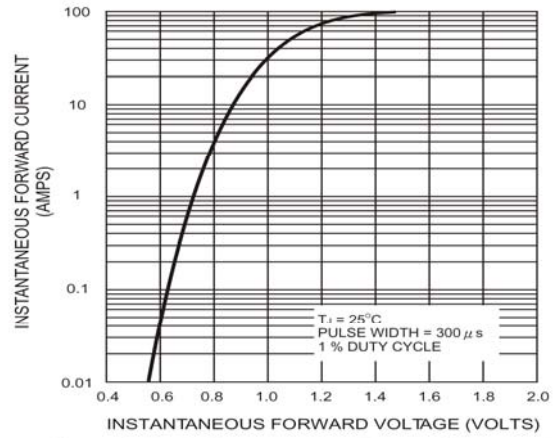


Figure 2. Typical Instantaneous Forward Characteristics Per Bridge Element

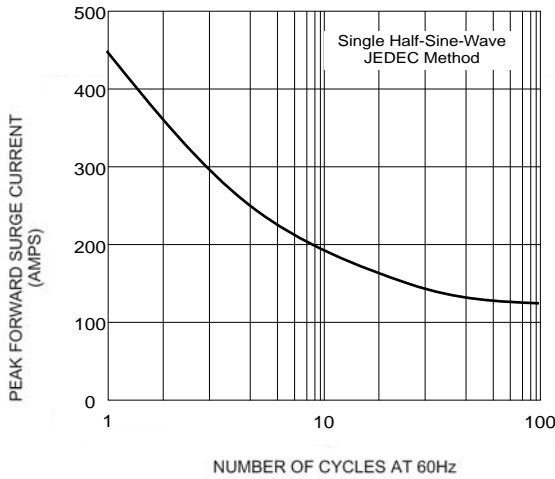


Figure 3. Maximum Non-repetitive Peak Forward Surge Current Per Bridge Element

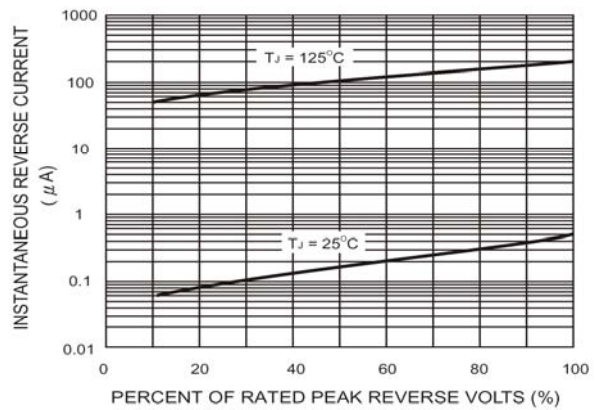


Figure 4. Typical Reverse Leakage Characteristics Per Bridge Element

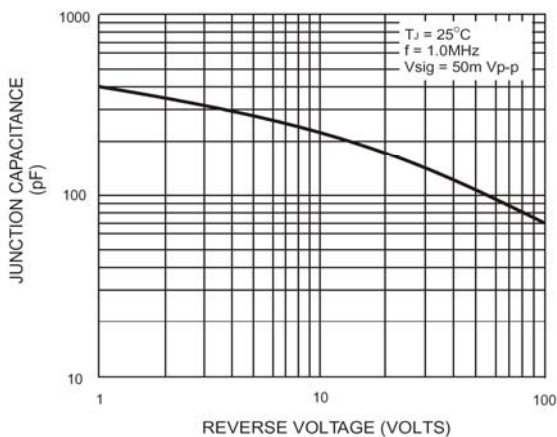


Figure 5. Typical Junction Capacitance Per Bridge Element

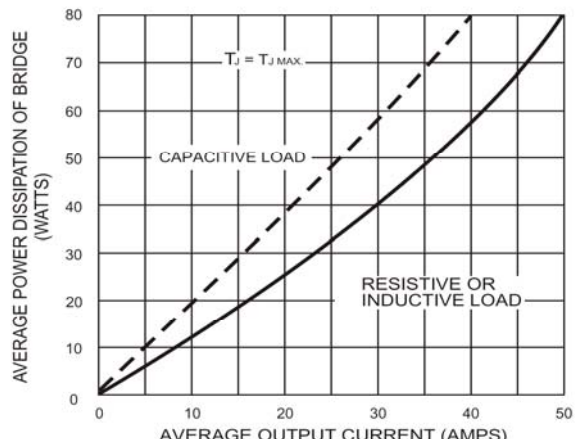


Figure 6. Maximum Power Dissipation