

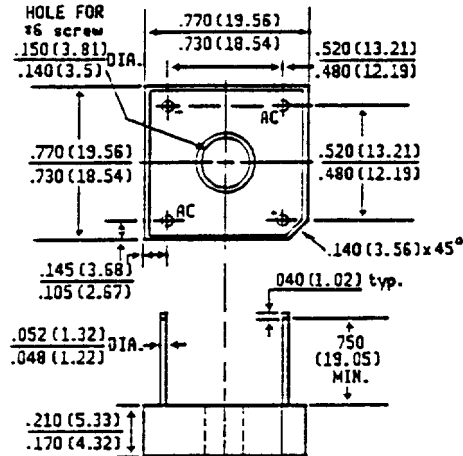
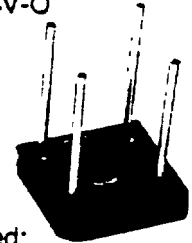
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GBPC8005 THRU GBPC810

GLASS PASSIVATED SINGLE - PHASE SILICON BRIDGE RECTIFIER
VOLTAGE - 50 to 1000 Volts CURRENT - 8.0 Amperes

FEATURES

- ◆ Glass passivated chip junctions
- ◆ Plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- ◆ High case dielectric strength
- ◆ Typical I_R less than $0.5 \mu A$
- ◆ High surge current capability
- ◆ Ideal for printed circuit boards
- ◆ High temperature soldering guaranteed:
265° C /10 seconds at 5lbs., (2.3 kg) tension



Polarity shown on side of case:
positive lead by beveled corner

Dimensions in inches
and
(millimeters)

MECHANICAL DATA

Case: Reliable construction utilizing molded plastic technique

Terminals: Leads solderable per MIL-STD-202, Method 208

Mounting Position: Any

Mounting: Thru hole for #6 screw

Weight: 0.15 ounces, 4.4 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

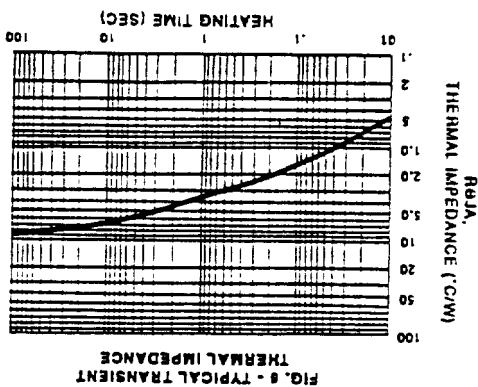
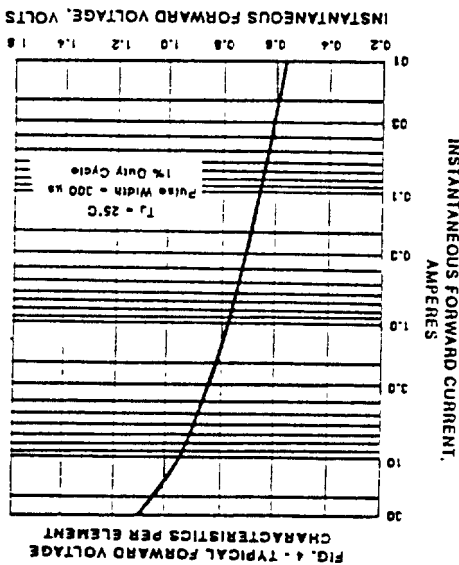
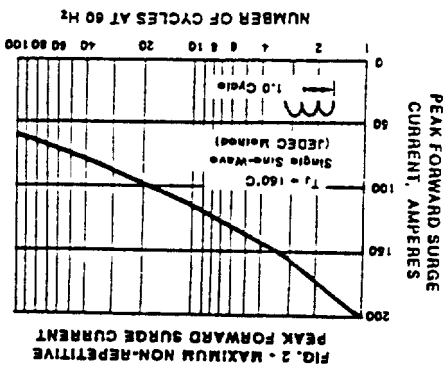
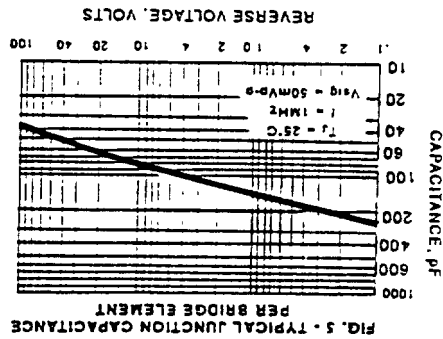
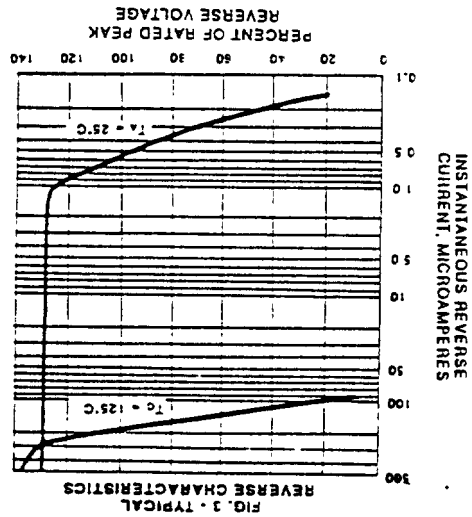
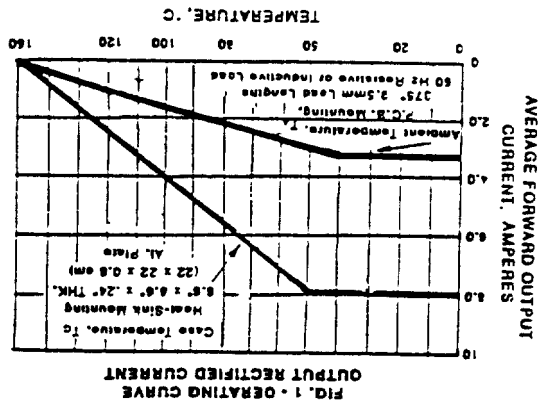
Ratings at 25°C ambient temperature unless otherwise specified.
60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

		GBPC 8005	GBPC 801	GBPC 802	GBPC 804	GBPC 806	GBPC 808	GBPC 810	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at $T_C = 50^\circ C$ (Note 1) at $T_A = 40^\circ C$ (Note 2)	$I_{(AV)}$				8.0				Amps
Peak Forward Surge Current Single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}				200				Amps
Rating for fusing ($t < 8.3ms$)	I^2t				160				A^2s
Maximum Instantaneous Forward Voltage Drop per element at 4.0 Amperes	V_F				1.0				Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per Bridge Element	I_R				10.0				μA
Typical Junction Capacitance per element (Note 3)	C_J				100				pt
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$				6.0				$^\circ C/W$
Operating Temperature Range	T_J				-55 to +150				$^\circ C$
Storage Temperature Range	T_{STG}				-55 to +150				$^\circ C$

NOTES: 1. Unit mounted on 8.6" sq. x .24" thick (22 x 22 x 0.6 cm) Al. plate.
2. Unit mounted on P.C. board at .375" .9.5mm lead lengths.
3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

GENERAL
INSTRUMENT

RATINGS AND CHARACTERISTIC CURVES GBPC8005 THRU GBPC810



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