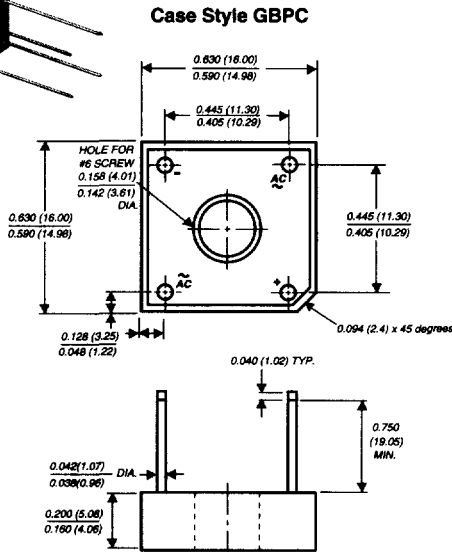
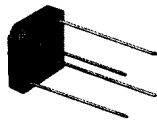


Glass Passivated Single-Phase Bridge Rectifier

**Reverse Voltage 50 and 1000V
Forward Current 6.0A**



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

Dimensions in inches and (millimeters)

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL listed under the Recognized Component Index, file number E54214
- Glass passivated chip junction
- High case dielectric with standing voltage of 1500 VRMS
- Typical I_{η} less than 0.5 μ A
- High forward surge current capability
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds at 5lbs. (2.3kg) tension

Mechanical Data

Case: Molded plastic body over passivated junctions
Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Mounting Position: Any (NOTE 1)

Mounting Torque: 5.0 in-lbs max.

Weight: 0.1 ounce, 2.8 grams

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOL	GBPC 6005	GBPC 601	GBPC 602	GBPC 604	GBPC 606	GBPC 608	GBPC 610	UNIT
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at $T_C = 50^\circ\text{C}$ (NOTE 1, 2) and $T_A = 40^\circ\text{C}$ (NOTE 3)	IF(AV)				6.0				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				175				A
Rating for fusing ($t < 8.3\text{ms}$)	I ² t				127				A ² sec
Typical thermal resistance per leg (NOTE 1)	ReJA ReJC				22 7.3				°C/W
Operating junction and storage temperature range	T _J , T _{STG}				-55 to +150			°C	

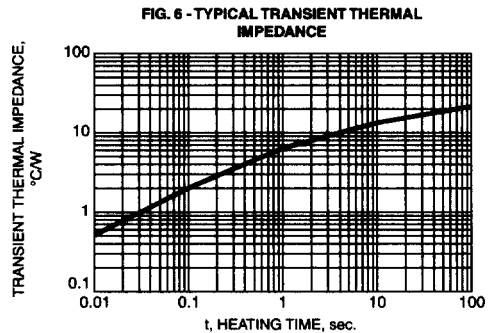
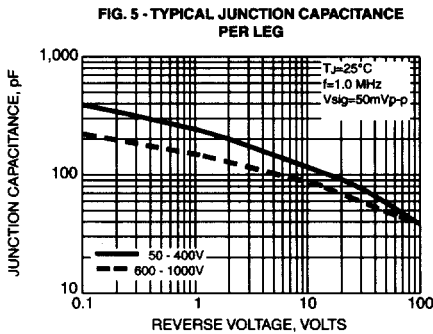
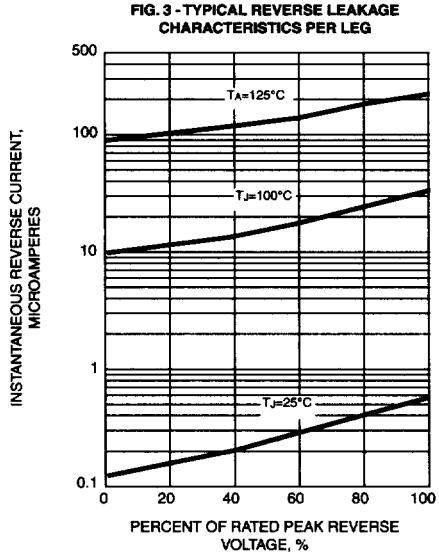
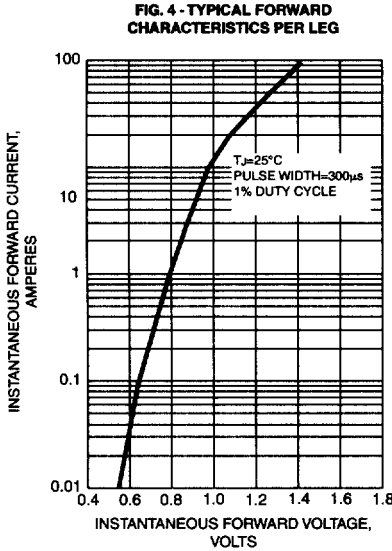
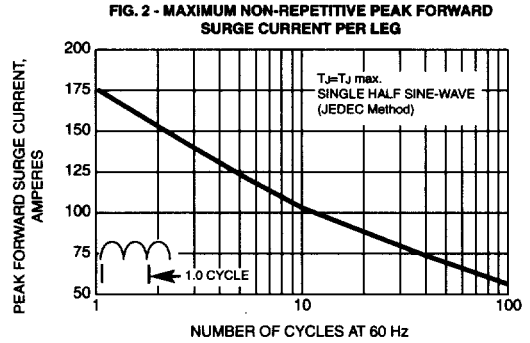
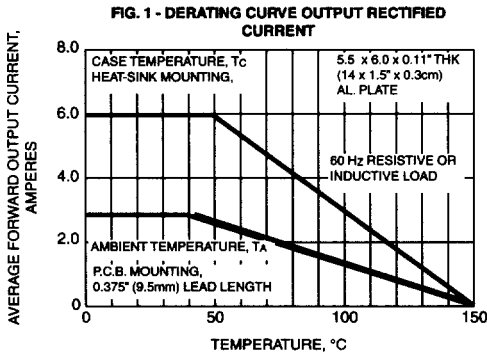
Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOL	GBPC 6005	GBPC 601	GBPC 602	GBPC 604	GBPC 606	GBPC 608	GBPC 610	UNIT
Maximum instantaneous forward voltage drop per leg at 3.0 A	V _F				1.0				V
Maximum DC reverse current at rated DC blocking voltage per leg $T_A = 25^\circ\text{C}$ and $T_A = 125^\circ\text{C}$	I _R				5.0 500				μ A
Typical junction capacitance per leg at 4.0V, 1MHz	C _J	186			90			pF	

Notes: (1) Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer with #6 screw
 (2) Unit mounted on 5.5 x 6.0 x 0.11" thick (14 x 15 x 0.3cm) Al. Plate
 (3) Unit mounted on P.C.B. at 0.375" (9.5mm) lead length with 0.5 x 0.5" (12 x 12mm) copper pads

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)



Bridge