## GBPC25005 THRU GBPC2510

# SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER VOLTAGE:50 TO 1000V CURRENT:25.0A

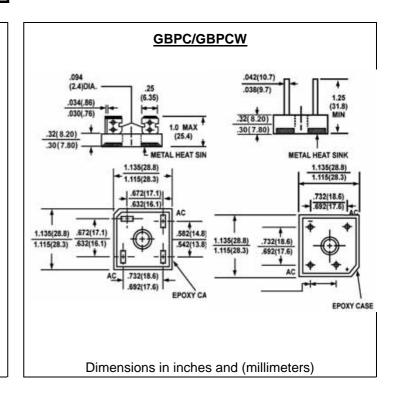


### **FEATURE**

Surge overload rating:300 A peak low profile design 1/4"Universal fast on terminal and \$\phi40\$ mil lead-wire available

### **MECHANICAL DATA**

Polarity: Polarity symbol marked on body Mounting: Hole thru for #10 screw



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS 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 Current at Ta=50°C	If(av)	25.0							А
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	300.0							Α
Maximum Instantaneous Forward Voltage at Forward current 12.5A	Vf	1.1							V
Maximum DC Reverse Current $Ta = 25^{\circ}C$	lr 10.0								μΑ
at rated DC blocking voltage Ta =100°C	" 500.0								μΑ
Operating Temperature Range	Tj	-55 to +175							°C
Storage and Operation Junction Temperature	Tstg	-55 to +175							°C

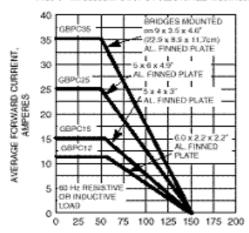
Note:

Suffix "W" for wire type

Rev.4, 1-Jul-03 www.gulfsemi.com

#### RATINGS AND CHARACTERISTIC CURVES GBPC25005 THRU GBPC2510

FIG. 1 - MAXIMUM OUTPUT RECTIFIED CURRENT



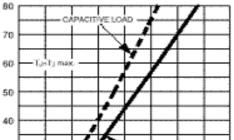
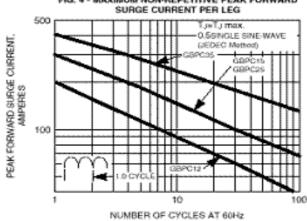


FIG. 3 - MAXIMUM POWER DESCRIPTION

ac Hz RESIS∑IVÉ OR . RBS-A:0.5 'C/W INDURTING LOAD discrete. AVERAGE FORWARD CURRENT, 30 Patris-Audi 5 25 GBPC15 20 15 5 \_GBPG12 RthS-A-1.610/W 0 10 20 30 90 100 o 50 60 70 40 AMBIENT TEMPERATURE, °C

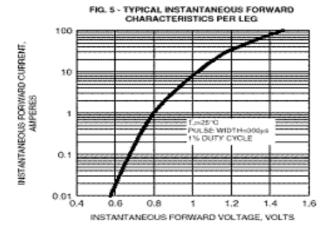
FIG. 2 - MAXIMUM OUTPUT RECTIFIED CURRENT

FIG. 4 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

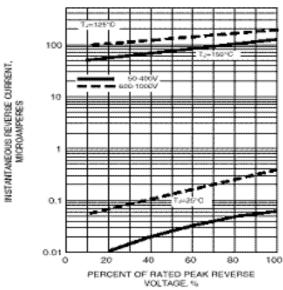


50 40 30 OR INDUCTIVE 20 LOAD 10 0 AVERAGE OUTPUT CURRENT, AMPERES

AVERAGE POWER DISSIPATION OF BRIDGE WATTS







<sup>1</sup> Rev.4, 1-Jul-03 www.gulfsemi.com