# **CE** CHENYI ELECTRONICS

# **GBPC6005 THRU GBPC610**

### SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 TO 1000V CURRENT:6.0A

### FEATURES

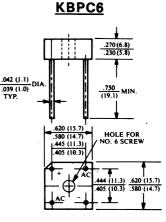
Surge overload rating: 125A peak

High case dielectric strength

Glass passivated chip design

#### **MECHANICAL DATA**

- . Terminal: Plated leads solderable per
  - MIL-STD 202E, method 208C
- . Case: UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: Polarity symbol marked on body
- . Mounting : Hole thru for #6 screw



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60HZ, resistive or inductive load rating at 25  $^{\circ}C$  , unless otherwise stated,

for capacitive load, derate current by 20%)

	SYMBOL	GBPC6005	GBPC601	GBPC602	GBPC604	GBPC606	GBPC608	GBPC610	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=75°C	lf(av)	6.0							А
Peak Forward Surge Current 8.3ms single									
half sine-wave superimposed on rated load	lfsm	125							А
Maximum Instantaneous Forward Voltage at									
forward current 3.0A DC	Vf	1.0							V
Maximum DC Reverse Voltage Ta=25 °C		10.0							
at rated DC blocking voltage Ta=100 $^{\circ}\mathrm{C}$	lr	lr 200							
Operating Temperature Range	Tj	-55 to +125							°C
Storage and operation Junction Temperature	Tstg	-55 to +150							°C



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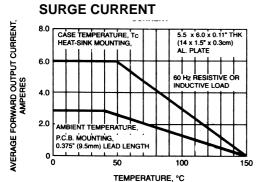
## SINGLE PHASE GLASS PASSIVATED

**BRIDGE RECTIFIER** 

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# RATINGS AND CHARACTERISTIC CURVES GBPC6005 THRU GBPC610

### FIG.1-MAXIMUM NON-REPETITIVE FORWARD



#### FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

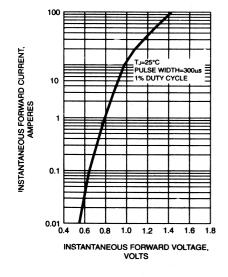


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

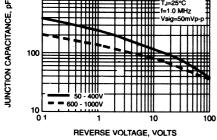
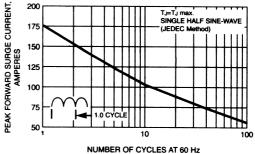


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE



#### FIG.4-TYPICAL REVERSE CHARACTERISTICS

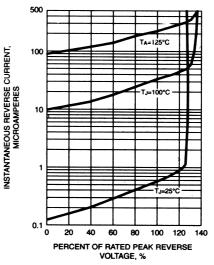


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

