



CHENYI ELECTRONICS

# GBPC6005 THRU GBPC610

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 TO 1000V CURRENT:6.0A

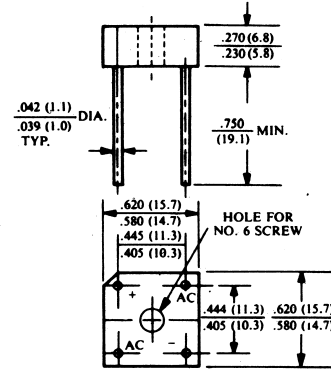
### FEATURES

- 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

### KBPC6



Dimensions in inches and (millimeters)

### 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	GBPC6005	GBPC601	GBPC602	GBPC604	GBPC606	GBPC608	GBPC610	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified current at Ta=75°C	I <sub>f(av)</sub>	6.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	125							A
Maximum Instantaneous Forward Voltage at forward current 3.0A DC	V <sub>f</sub>	1.0							V
Maximum DC Reverse Voltage Ta=25°C	I <sub>r</sub>	10.0							μ A
at rated DC blocking voltage Ta=100°C		200							μ A
Operating Temperature Range	T <sub>j</sub>	-55 to +125							°C
Storage and operation Junction Temperature	T <sub>stg</sub>	-55 to +150							°C



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BRIDGE RECTIFIER

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## RATINGS AND CHARACTERISTIC CURVES GBPC6005 THRU GBPC610

FIG.1-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

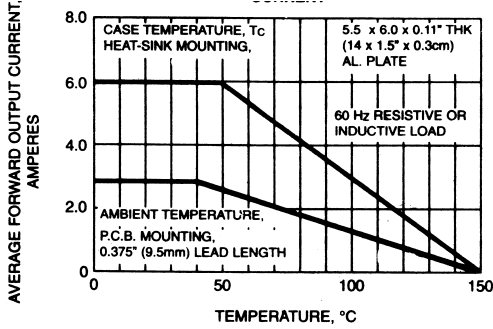


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

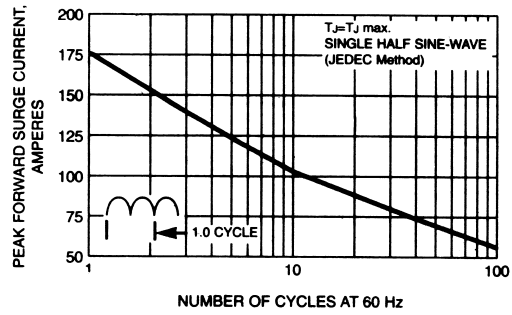


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

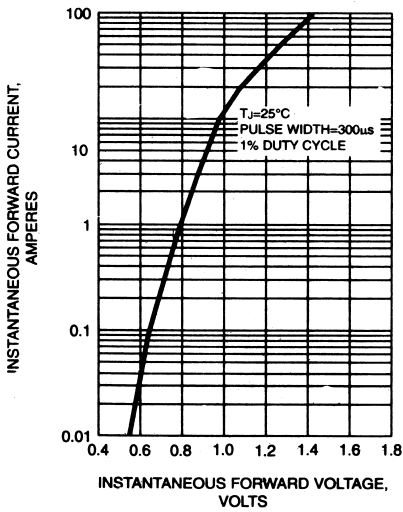


FIG.4-TYPICAL REVERSE CHARACTERISTICS

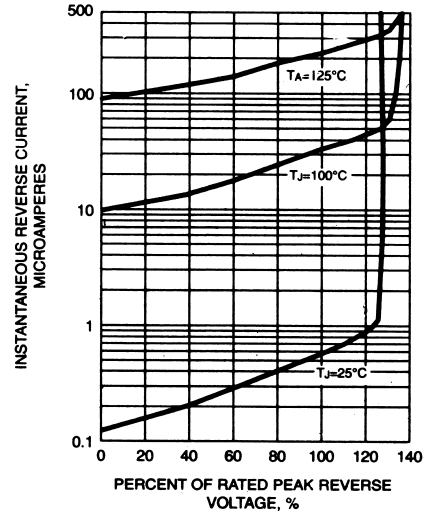


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

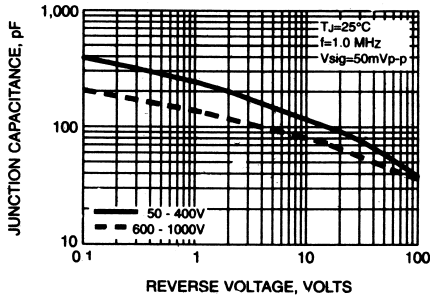


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

