



GBPC6005 THRU GBPC610

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 50 TO 1000V CURRENT:6.0A

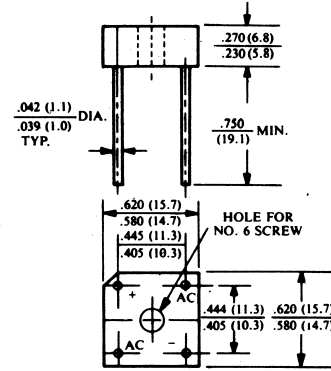
FEATURES

- 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 | 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 | If(av) | 6.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 125 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at forward current 3.0A DC | Vf | 1.0 | | | | | | | V |
| Maximum DC Reverse Voltage Ta=25°C | Ir | 10.0 | | | | | | | μ A |
| at rated DC blocking voltage Ta=100°C | | 200 | | | | | | | μ A |
| Operating Temperature Range | Tj | -55 to +125 | | | | | | | °C |
| Storage and operation Junction Temperature | Tstg | -55 to +150 | | | | | | | °C |



CHENYI ELECTRONICS

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RATINGS AND CHARACTERISTIC CURVES GBPC6005 THRU GBPC610

FIG.1-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

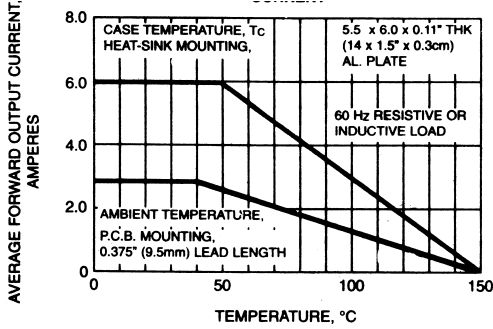


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

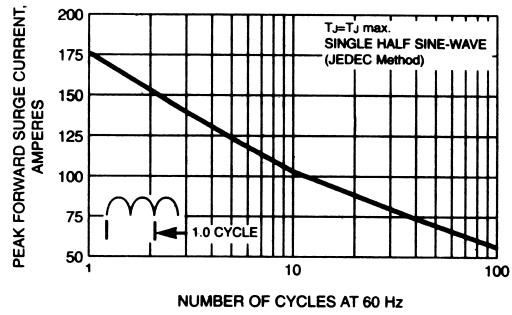


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

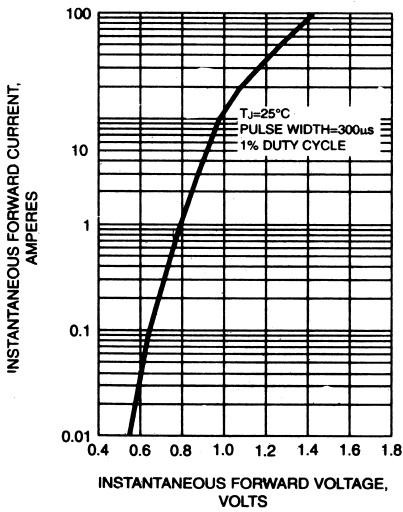


FIG.4-TYPICAL REVERSE CHARACTERISTICS

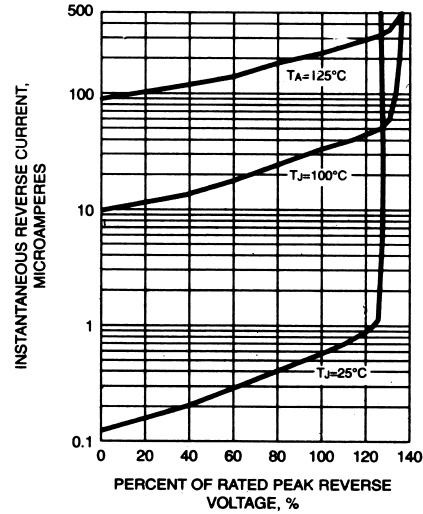


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

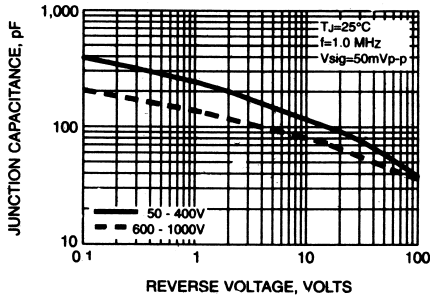


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

