

# **6A05G** THRU **6A100G**

## 6.0 AMPS. Glass Passivated Rectifiers

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Voltage Range 50 to 1000 Volts Current 6.0 Amperes

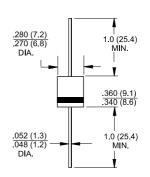
R-6

### **Features**

- ♦ Low forward voltage drop
- High current capability
- ♦ High reliability
- ♦ High surge current capability

#### Mechanical Data

- ♦ Cases: Molded plastic
- → Epoxy: UL 94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ♦ Polarity: Color band denotes cathode end
- High temperature soldering guaranteed: 250°C/10 seconds/.375",(9.5mm) lead lengths at 5 lbs.,(2.3kg) tension
- ♦ Weight: 1.65 grams



Dimensions in inches and (millimeters)

# **Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Tor capacitive load, derate current by 2070  |               |       |       |       |       |       |        |       |
|--|---------------|-------|-------|-------|-------|-------|--------|-------|
| Type Number  | 6A05G         | 6A10G | 6A20G | 6A40G | 6A60G | 6A80G | 6A100G | Units |
| Maximum Recurrent Peak Reverse Voltage   | 50            | 100   | 200   | 400   | 600   | 800   | 1000   | V     |
| Maximum RMS Voltage  | 35            | 70    | 140   | 280   | 420   | 560   | 700    | V     |
| Maximum DC Blocking Voltage  | 50            | 100   | 200   | 400   | 600   | 800   | 1000   | V     |
| Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @T <sub>A</sub> = 50°C                | 6.0           |       |       |       |       |       |        | Α     |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated Load<br>(JEDEC method) | 250           |       |       |       |       |       |        | Α     |
| Maximum Instantaneous Forward Voltage @6.0A  | 1.            | .1    | 1.0   |       |       |       |        | V     |
| Maximum DC Reverse Current @ T <sub>A</sub> =25°C  |               | 10    |       |       |       |       |        |       |
| at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C   | 100           |       |       |       |       |       | uA     |       |
| Typical Junction Capacitance ( Note )  | 100           |       |       |       |       |       |        | pF    |
| Operating and Storage Temperature Range T <sub>J</sub> ,T <sub>STG</sub>                                 | - 65 to + 150 |       |       |       |       |       |        | °C    |

Note: Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.



### RATINGS AND CHARACTERISTIC CURVES (6A05G THRU 6A100G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

Single PhaseHalf Wave 60Hz
Resistive of Inductive Load
Ground plane
1" x 1" Copper surface area
PC BOARD
Recommanded
PC Board
Mounting

0 20 40 60 80 100 120 140 160 180 200

AMBIENT TEMPERATURE. (°C)

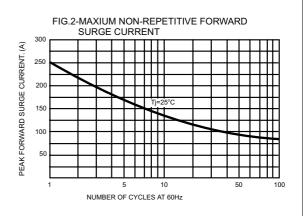


FIG.3- TYPICAL FORWARD CHARACTERISTICS

