



6.0 AMPS. Glass Passivated Rectifiers





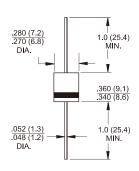


## **Features**

- ♦ Glass passivated chip junction.
- ♦ High efficiency, Low VF
- ♦ High current capability
- ♦ High reliability
- ♦ High surge current capability
- ♦ Low power loss
- → Green compound with suffix "G" on packing code & prefix "G" on datecode.

## **Mechanical Data**

- ♦ Cases: Molded plastic
- Lead: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ♦ Polarity: Color band denotes cathode
- High temperature soldering guaranteed: 260 °C /10 seconds/.375",(9.5mm) lead lengths at 5 lbs.,(2.3kg) tension
- ♦ Weight: 1.65 grams



#### Dimensions in inches and (millimeters)

Marking Diagram



# **Maximum Ratings and Electrical Characteristics**

Rating at  $25\,^{\circ}$ C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

| Type Number   | Symbol         | 6A<br>05G     | 6A<br>10G | 6A<br>20G | 6A<br>40G | 6A<br>60G | 6A<br>80G | 6A<br>100G | 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<br>Current .375"(9.5mm) Lead Length<br>@T <sub>A</sub> = 50 °C          | <b>I</b> F(AV) | 6.0           |           |           |           |           |           |            | А        |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated<br>Load (JEDEC method ) | IFSM           | 250           |           |           |           |           |           |            | А        |
| Maximum Instantaneous Forward Voltage @6.0A   | VF             | 1.1 1.0       |           |           |           |           |           | V          |          |
| $\begin{tabular}{lllllllllllllllllllllllllllllllllll$   |                | 10<br>100     |           |           |           |           |           |            | uA<br>uA |
| Typical Junction Capacitance ( Note 3)  | Cj             | 60            |           |           |           |           |           |            | pF       |
| Typical Thermal Resistance (Note 2)   | RθJA           | 35            |           |           |           |           |           |            | °C/W     |
| Operating and Storage Temperature Range   | TJ,Tstg        | - 65 to + 150 |           |           |           |           |           |            | °C       |

Notes: 1. Pulse Test with PW=300 usec,1% Duty Cycle

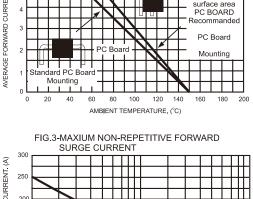
- 2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.
- 3. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

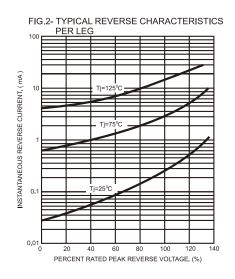
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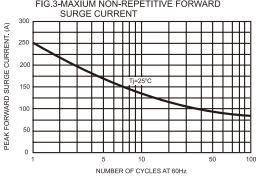


## RATINGS AND CHARACTERISTIC CURVES (6A05G THRU 6A100G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE AVERAGE FORWARD CURRENT AMPERES Resistive of Inductive Load Ground plane
1" x 1" Copper
surface area
PC BOARD Mounting









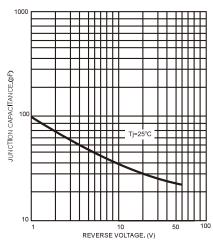
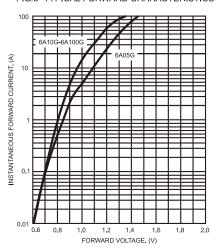


FIG.5- TYPICAL FORWARD CHARACTERISTICS



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