# UG2F THRU UG2G

## ULTRAFAST EFFICIENT PLASTIC SILICON RECTIFIER

**VOLTAGE：300 TO 400V　　CURRENT： 2.0A**

GULF SEMI

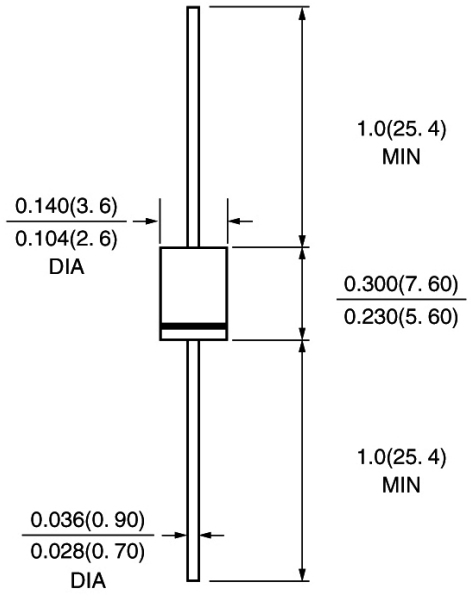
## FEATURE

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250℃/10sec/0.375″ lead length at 5 lbs tension

## MECHANICAL DATA

Terminal：Plated axial leads solderable per MIL-STD 202E, method 208C
Case：Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity：color band denotes cathode
Mounting position：any

**DO-15/DO-204AC**




Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25℃, unless otherwise stated)

| | SYMBOL | UG2F | UG2G | units |
|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 300 | 400 | V |
| Maximum RMS Voltage | Vrms | 210 | 280 | V |
| Maximum DC blocking Voltage | Vdc | 300 | 400 | V |
| Maximum Average Forward Rectified Current 3/8″ lead length at Ta =50℃ | If(av) | 2.0 | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 50.0 | | A |
| Maximum Forward Voltage at Forward current 2.0A Peak | Vf | 1.1 | | V |
| Maximum DC Reverse Current Ta =25℃<br>at rated DC blocking voltage Ta =125℃ | Ir | 5.0<br>200.0 | | μA<br>μA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 30 | | nS |
| Typical Junction Capacitance (Note 2) | Cj | 15 | | pF |
| Typical Thermal Resistance (Note 3) | Rth(ja) | 45 | | ℃/W |
| Storage and Operating Junction Temperature | Tstg,Tj | -55 to +150 | | ℃ |

Note：

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8″ lead length, P.C. Board Mounted

## RATINGS AND CHARACTERISTIC CURVES UG2F THRU UG2G

[1]

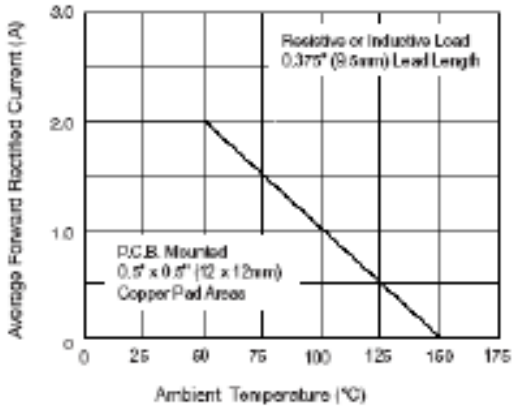



Figure 1. Maximum Forward Current Derating Curve

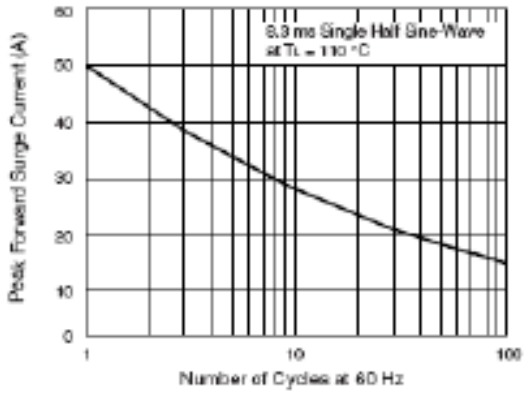



Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

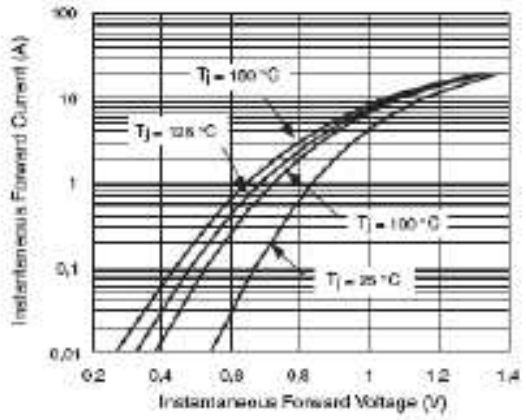



Figure 3. Typical Instantaneous Forward Characteristics

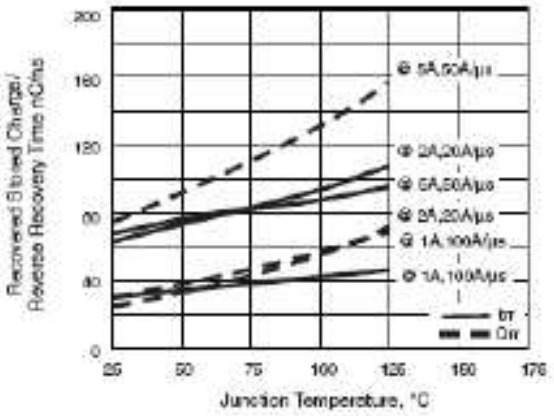



Figure 5. Reverse Switching Characteristics

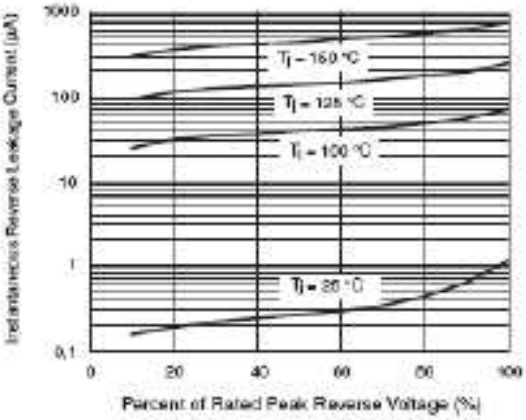



Figure 4. Typical Reverse Leakage Characteristics

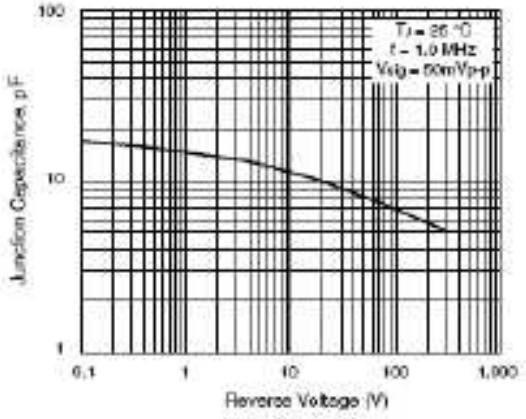



Figure 6. Typical Junction Capacitance