# RG10JGE

# SINTERED GLASS JUNCTION FAST SWITCHING PLASTIC RECTIFIER

VOLTAGE: 600 V CURRENT: 1.0A



## **FEATURE**

High temperature metallurgic ally bonded construction Sintered glass cavity free junction Capability of meeting environmental standard of MIL-S-19500 High temperature soldering guaranteed 350°C /10sec/0.375"lead length at 5 lbs tension

Operate at Ta =60°C with no thermal run away Typical Ir<0.2 $\mu$ A

Low power loss, high efficient

### **MECHANICAL DATA**

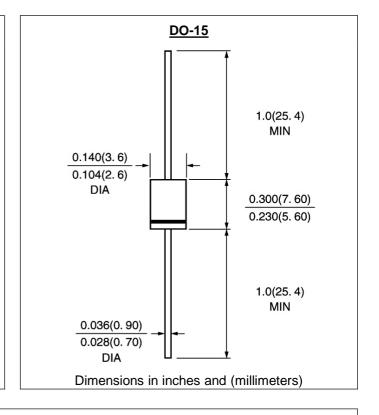
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C

Case: Molded with UL-94 Class V-0 recognized Flame

Retardant Epoxy

Polarity: color band denotes cathode

Mounting position: any



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

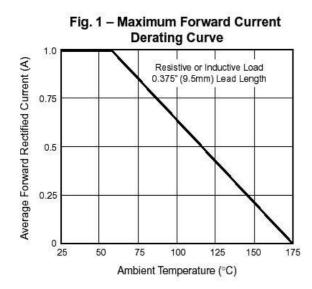
|   | SYMBOL   | RG10JGE     | units |
|---|----------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage  | Vrrm     | 600         | V     |
| Maximum RMS Voltage   | Vrms     | 420         | V     |
| Maximum DC blocking Voltage   | Vdc      | 600         | V     |
| Maximum Average Forward Rectified Current 3/8"lead length at Ta =60°C             | If(av)   | 1.0         | А     |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm     | 50          | А     |
| Maximum Forward Voltage at rated Forward Current and 25°C                         | Vf       | 2.0         | V     |
| Maximum DC Reverse Current Ta =25°C   | lr .     | 10          | μΑ    |
| at rated DC blocking voltage Ta =125°C  | "        | 100         | μΑ    |
| Maximum Reverse Recovery Time (Note 1)  | Trr      | 35          | nS    |
| Typical Junction Capacitance (Note 2)   | Cj       | 33          | pF    |
| Typical Thermal Resistance (Note 3)   | R(ja)    | 20          | °C /W |
| Storage and Operating Temperature Range   | Tstg, Tj | -55 to +150 | °C    |

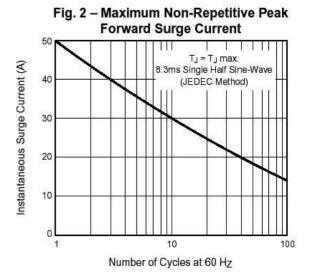
#### Note:

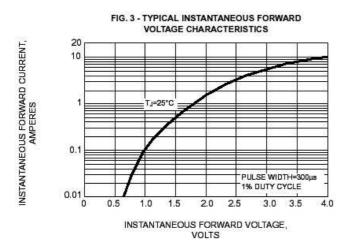
- 1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

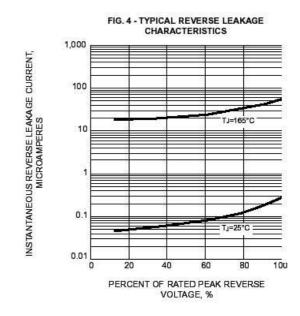
Rev.4, 1 www.gulfsemi.com

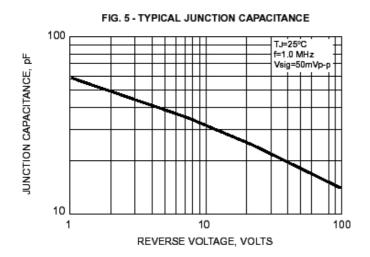
### RATINGS AND CHARACTERISTIC CURVES RGI0JGE











<sup>1</sup> Rev.4 www.gulfsemi.com