

# RG1J

## SINTERED GLASS JUNCTION FAST SWITCHING RECTIFIER

VOLTAGE: 600V

CURRENT: 1.0A

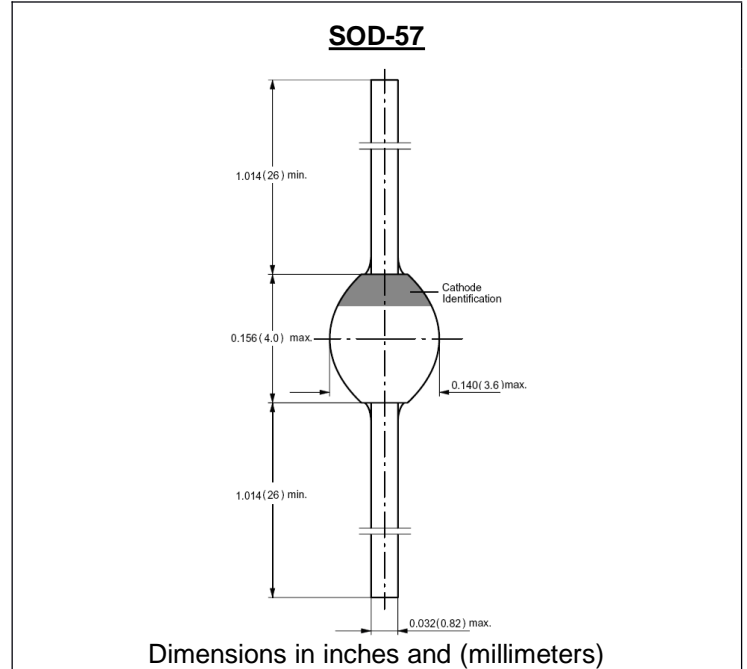


### FEATURE

High temperature metallurgically 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 =55°C with no thermal runaway  
Fast switching for high efficiency

### MECHANICAL DATA

Case: SOD-57 sintered glass case  
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C  
Polarity: color band denotes cathode end  
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   | RG1J        | 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 =55°C                      | If(av)   | 1.0         | A     |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load          | I fsm    | 30          | A     |
| Maximum Forward Voltage at rated Forward Current and 25°C                                  | Vf       | 1.3         | V     |
| Maximum full load reverse current full cycle average 0.375"(9.5MM) lead length at Ta=100°C | Ir(av)   | 100         | μA    |
| Maximum DC Reverse Current at rated DC blocking voltage                                    | Ir       | 2.0<br>100  | μA    |
| Typical Reverse Recovery Time (Note 1)   | Trr      | 200         | nS    |
| Typical Junction Capacitance (Note 2)  | Cj       | 15          | pF    |
| Typical Thermal Resistance (Note 3)  | Rth(ja)  | 55          | °C /W |
| Storage and Operating Temperature Range  | Tstg, Tj | -65 to +175 | °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

## RATINGS AND CHARACTERISTIC CURVES RG1J

