

# 1N5061 THRU 1N5062

## SINTERED GLASS JUNCTION AVALANCHE RECTIFIER

VOLTAGE: 600V to 800V

CURRENT: 2.0A



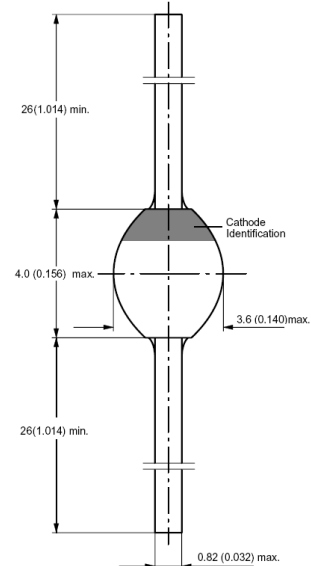
### FEATURE

Glass passivated  
High maximum operating temperature  
Low leakage current  
Excellent stability  
Guaranteed avalanche energy absorption capability

### 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

### SOD-57



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

|  | SYMBOL         | 1N5061               | 1N5062 | units       |
|--|----------------|----------------------|--------|-------------|
| Maximum Recurrent Peak Reverse Voltage   | $V_{RRM}$      | 600                  | 800    | V           |
| Maximum RMS Voltage  | $V_{RMS}$      | 420                  | 560    | V           |
| Maximum DC blocking Voltage  | $V_{DC}$       | 600                  | 800    | V           |
| Maximum Average Forward Rectified Current 3/8" lead length at $T_{tp} = 45^{\circ}C$ | $I_{FAV}$      | 2.0                  |        | A           |
| Peak Forward Surge Current at $t=10ms$ half sinewave                                 | $I_{FSM}$      | 50                   |        | A           |
| Maximum Forward Voltage at rated Forward Current at 1.0A                             | $V_F$          | 1.0                  |        | V           |
| Maximum DC Reverse Current at rated DC blocking voltage                              | $I_R$          | $T_a = 25^{\circ}C$  | 1.0    | $\mu A$     |
|  |                | $T_a = 165^{\circ}C$ | 150.0  |             |
| Typical Reverse Recovery Time (Note 1)   | $T_{rr}$       | 3000                 |        | nS          |
| Diode capacitance at 0V, 1MHz  | $C_d$          | 50                   |        | pF          |
| Typical Thermal Resistance (Note 2)  | $R_{th(ja)}$   | 100                  |        | K/W         |
| Storage and Operating Junction Temperature   | $T_{stg}, T_j$ | -65 to +175          |        | $^{\circ}C$ |

#### Note:

1. Reverse Recovery Condition  $I_f = 0.5A$ ,  $I_r = 1.0A$ ,  $I_{rr} = 0.25A$
2. Device mounted on epoxy-glass printed-circuit board, 1.5mm thick

RATINGS AND CHARACTERISTIC CURVES 1N5061 THRU 1N5062

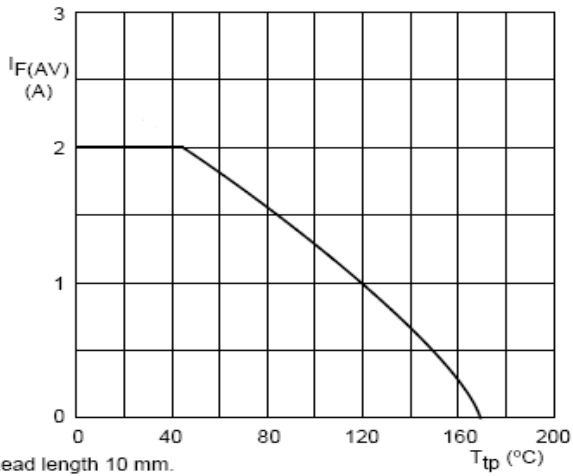


Fig.1 Maximum permissible average forward current as a function of tie-point temperature (including losses due to reverse leakage).

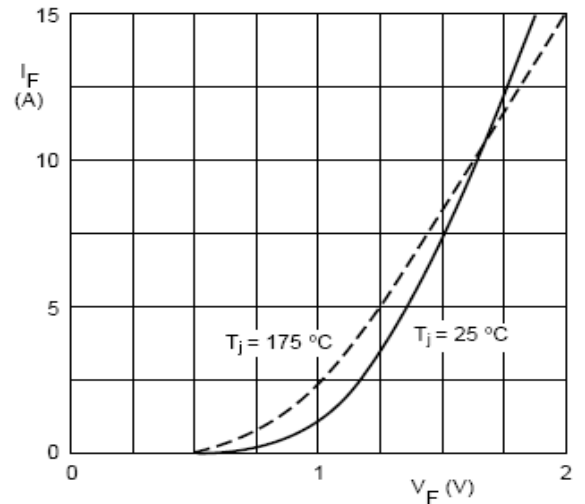


Fig.2 Forward current as a function of forward voltage; maximum values.

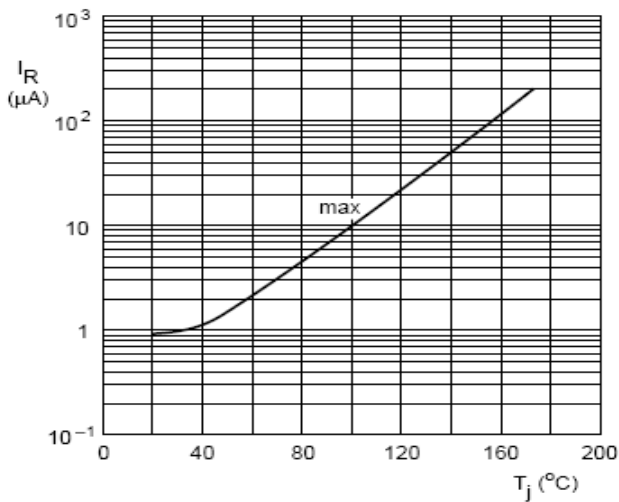


Fig.3 Reverse current as a function of junction temperature; maximum values.

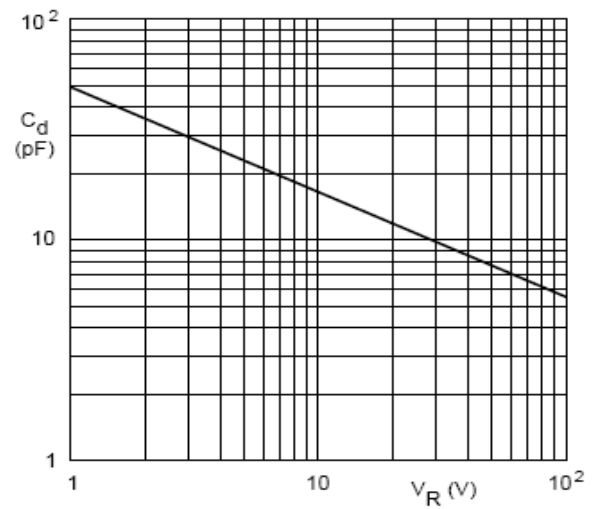


Fig.4 Diode capacitance as a function of reverse voltage; typical values.

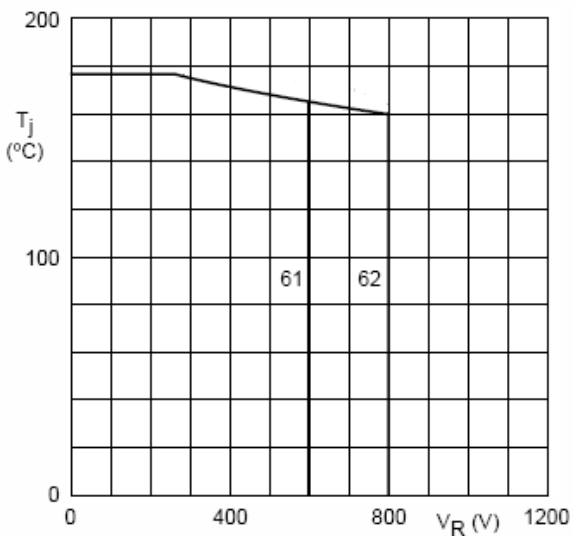


Fig.5 Maximum permissible junction temperature as a function of reverse voltage.