# D1N5806

## SINTERED GLASS JUNCTION AVALANCHE RECTIFIER

**VOLTAGE：160V** **CURRENT: 1.0A**

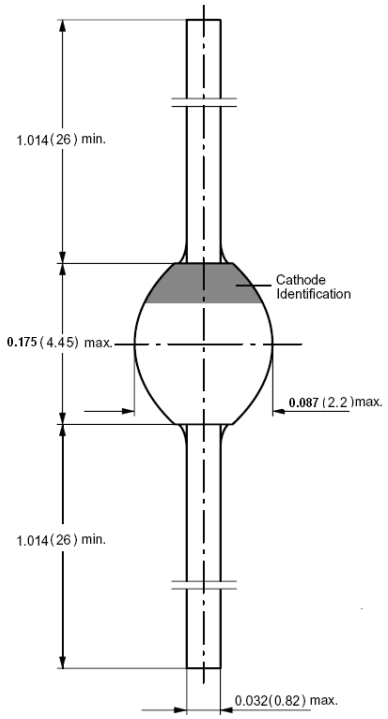
## FEATURE

Glass passivated
Hermetically sealed package
Low reverse current

## MECHANICAL DATA

Case: SOD-57 sintered glass case
Terminal: Plated axial leads solderable per MIL-STD 750, method 2026
Polarity: color band denotes cathode end
Mounting position: any

**SOD-57-1**




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 | D1N5806 | units |
|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 160 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 112 | V |
| Maximum DC blocking Voltage | $V_{DC}$ | 160 | V |
| Maximum Average Forward Rectified Current 3/8"lead length at Ta=55℃ | $I_{FAV}$ | 1.0 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$ | 25 | A |
| Maximum Forward Voltage at rated Forward Current 1.0A and 25℃ | $V_F$ | 0.875 | V |
| Maximum DC Reverse Current at $V_{DC}$ =160V and 25℃ | $I_R$ | 1.0 | μA |
| Maximum DC Reverse Current at $V_{DC}$ =160V and 150℃ | $I_R$ | 200 | μA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 25 | nS |
| Typical Junction Capacitance (Note 2) | Cj | 25.0 | pF |
| Typical Thermal Resistance (Note 3) | Rth(ja) | 45.0 | ℃/W |
| Storage and Operating Junction Temperature | Tstg, Tj | -65 to +175 | ℃ |

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 D1N5806

FIG. 1 - FORWARD CURRENT DERATING CURVE

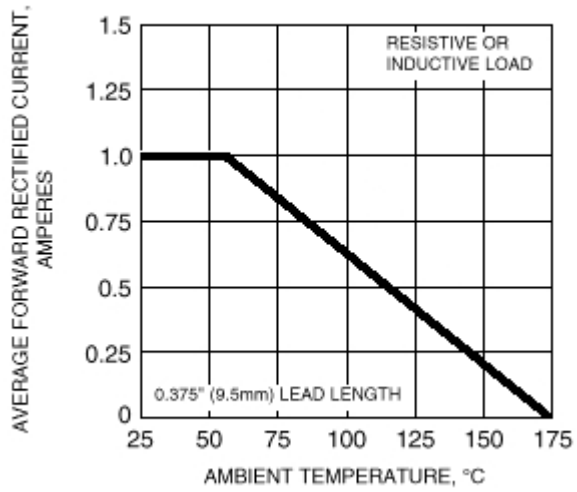



FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

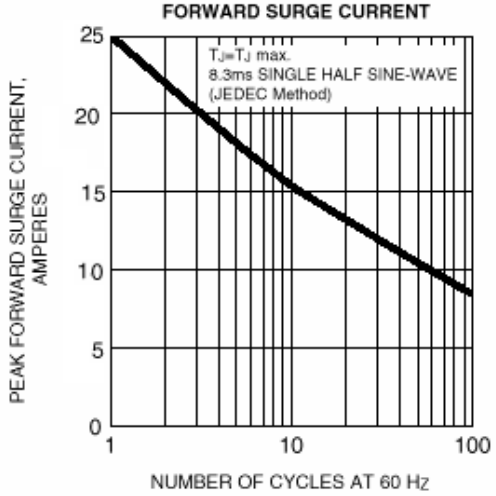



FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

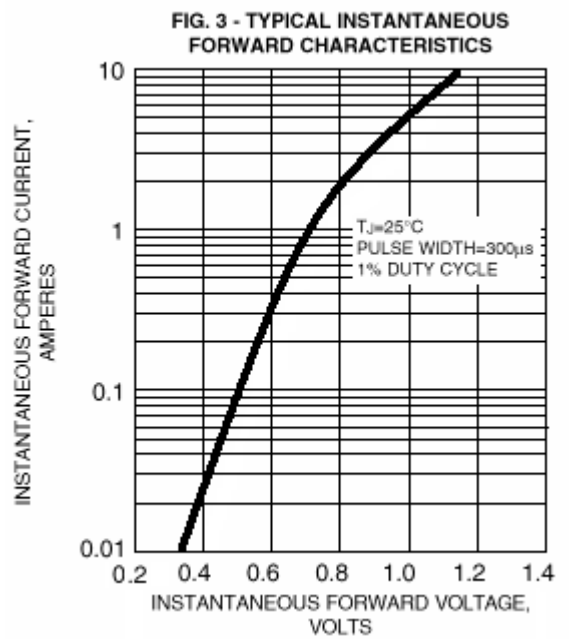



FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

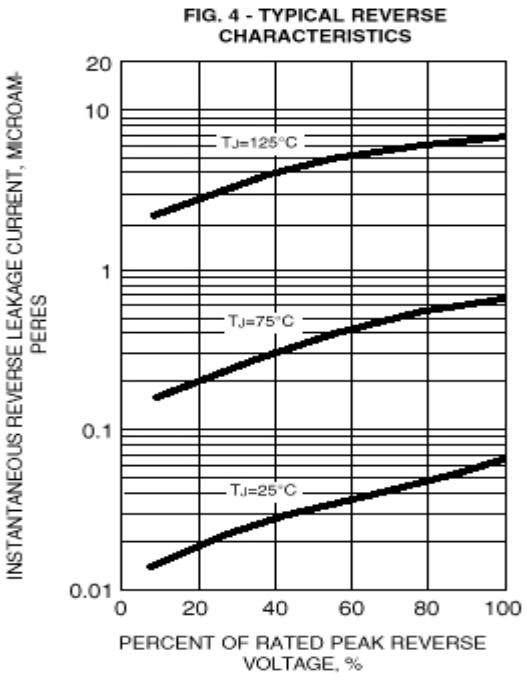



FIG. 5 - TYPICAL JUNCTION CAPACITANCE