# BYV36D

**SINTERED GLASS JUNCTION**
**FAST AVALANCHE RECTIFIER**

**VOLTAGE: 800V** **CURRENT: 1.5A**

GULF SEMI

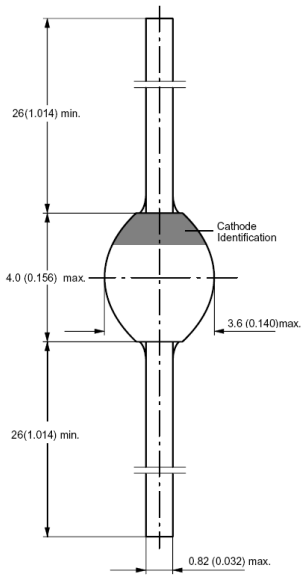
## FEATURE

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 millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| | SYMBOL | BYV36D | units |
|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 800 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 560 | V |
| Maximum DC blocking Voltage | $V_{DC}$ | 800 | V |
| Reverse Breakdown Voltage at IR =0. 1mA | $V_{(BR)R}$ | 900min | V |
| Maximum Average Forward Rectified Current at Ttp=60°C, lead length=10mm | $I_{F(AV)}$ | 1.5 | A |
| Peak Forward Surge Current at t=10ms half sinewave | $I_{FSM}$ | 30 | A |
| Maximum Forward Voltage at rated Forward Current and 25°C $I_F$ = 1.0A | $V_F$ | 1.45 | V |
| Maximum DC Reverse Current Tj = 25°C<br>at rated DC blocking voltage Tj = 150°C | $I_R$ | 5.0<br>150 | μA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 150 | nS |
| Non Repetitive Reverse Avalanche Energy at L=120mH | $E_R$ | 10 | mJ |
| Typical Diode Capacitance at f=1MHz,$V_R$=0V | Cd | 40 | pF |
| Typical Thermal Resistance (Note 2) | $R_{th(ja)}$ | 100 | K/W |
| Storage and Operating Junction Temperature | Tstg, Tj | -65 to +175 | ℃ |

Note:
1. Reverse Recovery Condition $I_F$ = 0.5A, $I_R$ = 1.0A, $I_{RR}$ = 0.25A
2. Device mounted on an epoxy-glass printed-circuit boars, 1.5mm thick; thichness of Cu-layer≥40 μ m

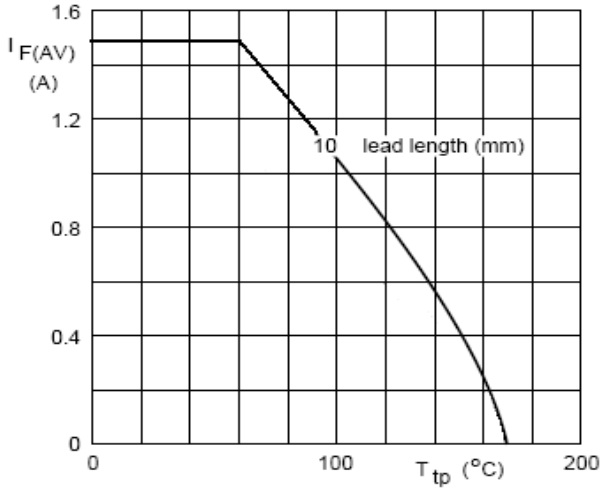



Fig.1 Maximum average forward current as a function of tie-point temperature (including losses due to reverse leakage).

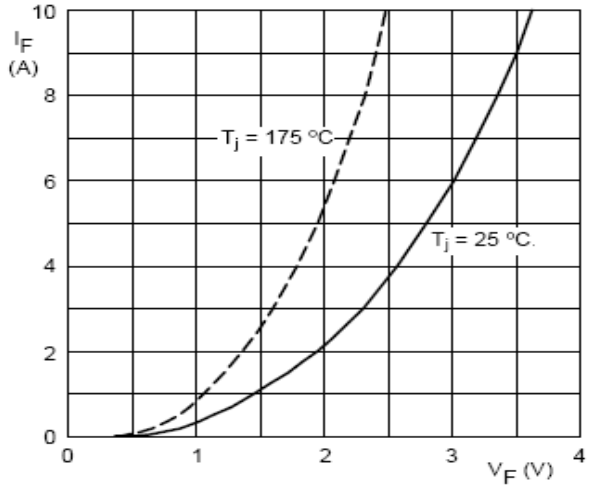



Fig.2 Forward current as a function of forward voltage; maximum values.

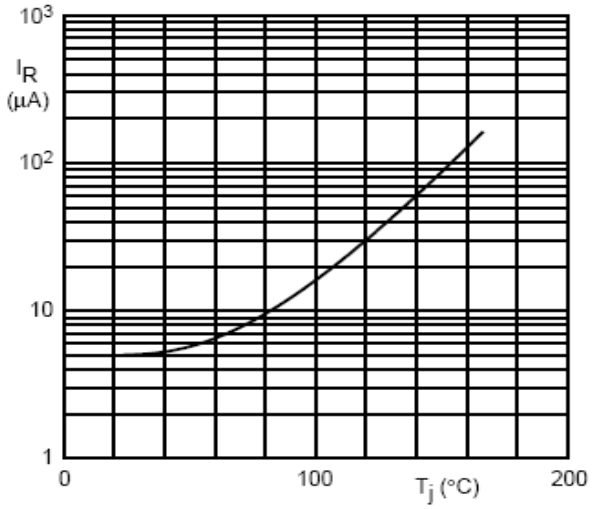



Fig.3 Reverse current as a function of junction temperature; maximum values.

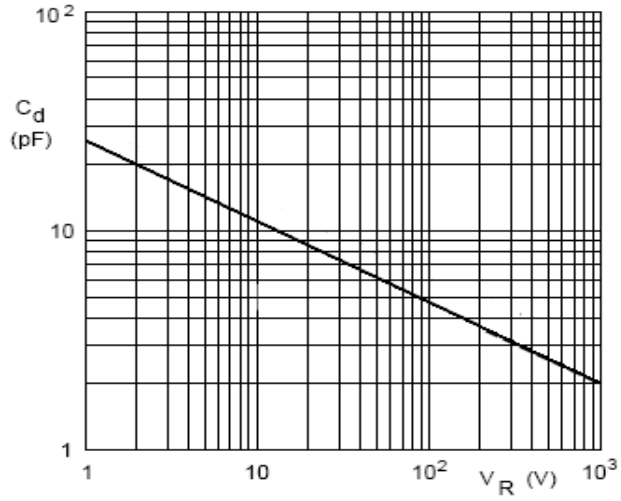



Fig.4 Diode capacitance as a function of reverse voltage, typical values.

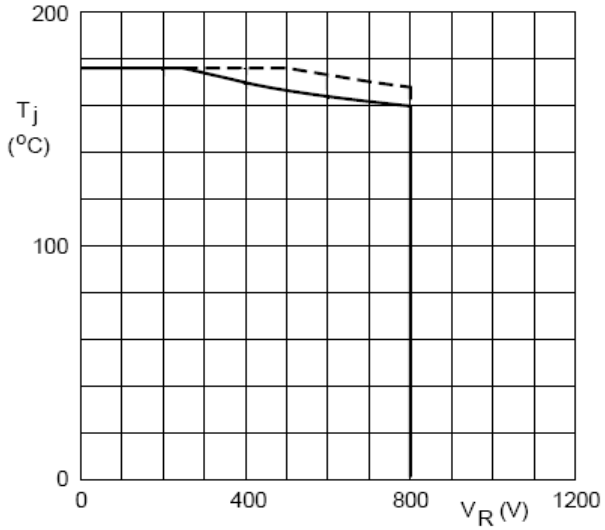



Fig.5 Maximum permissible junction temperature as a function of reverse voltage.