# 1N5417S

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

**VOLTAGE：200V** **CURRENT: 3.0A**

VOLTARISTECH
INC.
POWER • PRECISION • INNOVATION

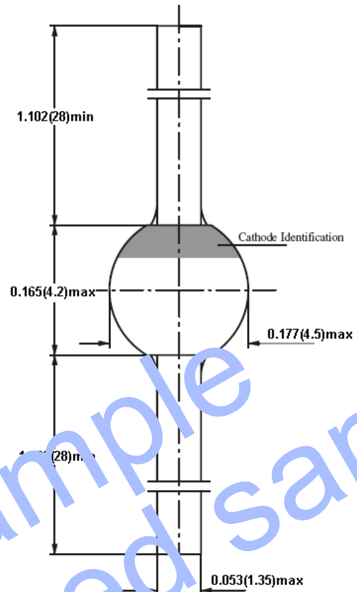
## FEATURE

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

## MECHANICAL DATA

Case: SOD-64 sintered glass case
Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Polarity: color band denotes cathode end
Mounting position: any

**SOD-64**




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 | 1N5417S | units |
|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 200 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 160 | V |
| Maximum DC blocking Voltage | $V_{DC}$ | 200 | V |
| Maximum Average Forward Rectified Current 3/8"lead length at Ta=55℃ | $I_{FAV}$ | 3.0 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$ | 100 | A |
| Maximum Forward Voltage at Forward Current 9.0A and 25℃ | $V_F$ | 1.5 | V |
| Maximum DC Reverse Current Ta =25℃<br>at rated DC blocking voltage Ta =100℃ | $I_R$ | 1.0<br>20.0 | μA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 75 | nS |
| Typical Thermal Resistance (Note 2) | $R_{th(ja)}$ | 25.0 | ℃ /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. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

FIG. 1 - FORWARD CURRENT DERATING CURVE

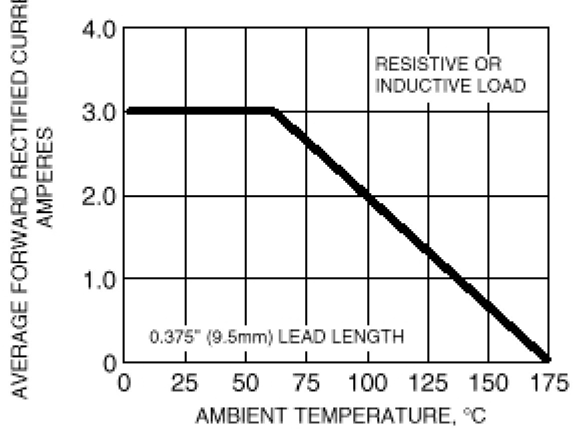



FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

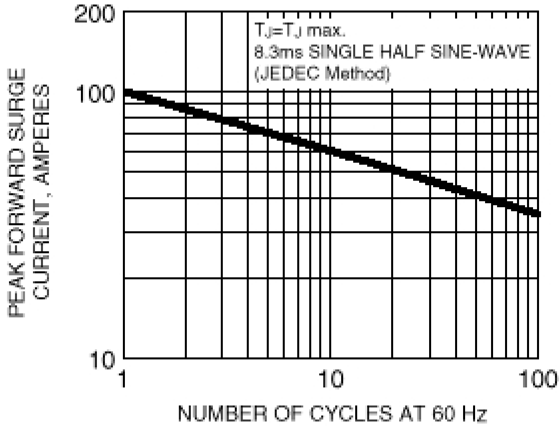



FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

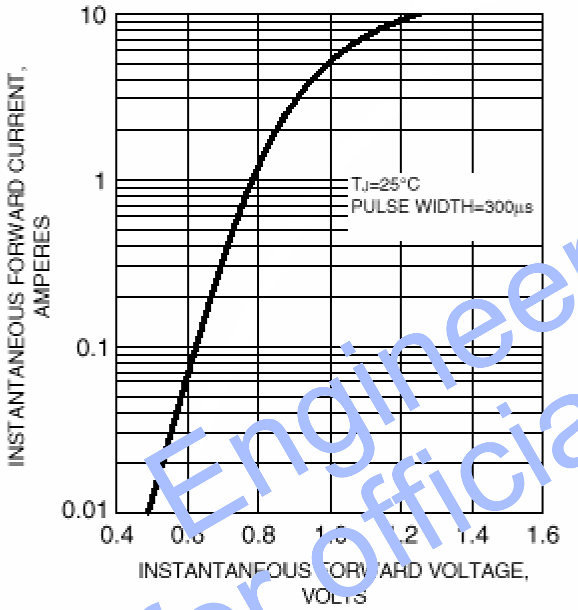



FIG. 4 - TYPICAL REVERSE CHARACTERISTIC

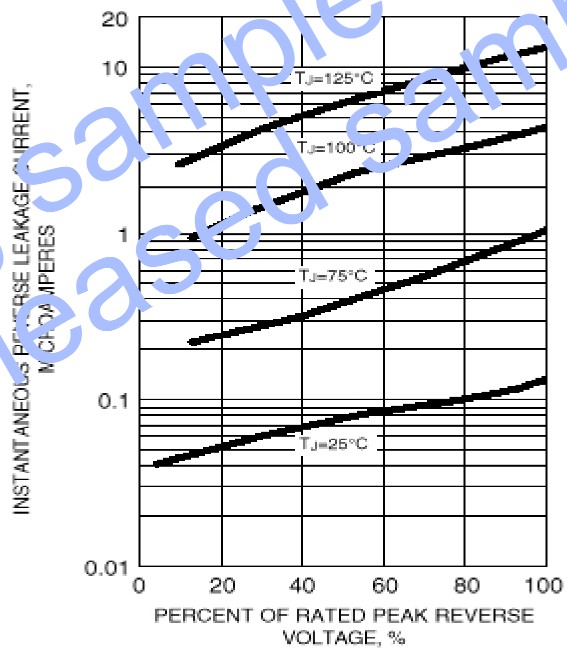



FIG. 5 - TYPICAL JUNCTION CAPACITANCE