

# Sintered Glass Junction Fast Avalanche Rectifier

## Features

- Glass passivated
- Hermetically sealed package
- Low reverse current
- Soft recovery characteristics

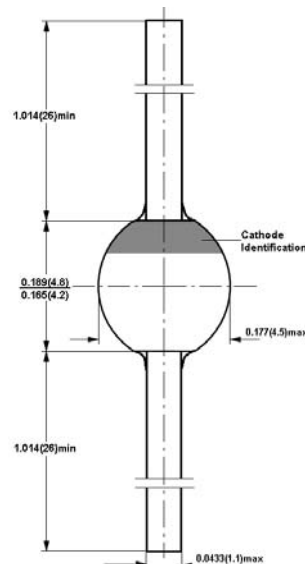
## Mechanical Data

- Case: G-4 sintered glass case
- Terminal: Plated axial leads solderable per JSTD-002
- Polarity: Color band denotes cathode

## Marking

- 1N5420

Dimensions in inches and (millimeters)



Package: G4

## Absolute Maximum Ratings and Electrical Characteristics

(single-phase, half-wave, 60HZ,  $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	V
Maximum RMS Voltage	$V_{RMS}$	420	V
Maximum DC Blocking Voltage	$V_{DC}$	600	V
Maximum Reverse Breakdown Voltage $I_R=50\mu\text{A}$	$V_{BR}$	660	V
Maximum Average Forward Rectified Current 3/8"lead Length at $T_A=55^{\circ}\text{C}$	$I_{FAV}$	4.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	$I_{FSM}$	120	A
Maximum Forward Voltage at Forward Current 9.0A	$V_F$	1.5	V
Maximum DC Reverse Current $T_A=25^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_A=100^{\circ}\text{C}$	$I_R$	1.0 20.0	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	250	nS
Typical Junction Capacitance (Note 2)	$C_j$	50.0	pF
Typical Thermal Resistance (Note 3)	$R_{th(ja)}$	20.0	$^{\circ}\text{C/W}$
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-65 to +175	$^{\circ}\text{C}$

Note:

1. Reverse Recovery Condition  $I_f=0.5\text{A}$ ,  $I_r=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$
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

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## Typical Electrical Characteristic Curves

