

**1N5617**

**SINTERED GLASS JUNCTION  
FAST AVALANCHE RECTIFIER**

**VOLTAGE: 400V**

**CURRENT: 1.0A**



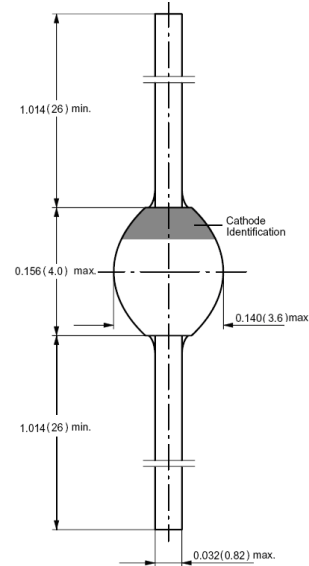
**FEATURE**

Glass passivated  
Hermetically sealed package  
Low reverse current  
Soft recovery characteristics

**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)

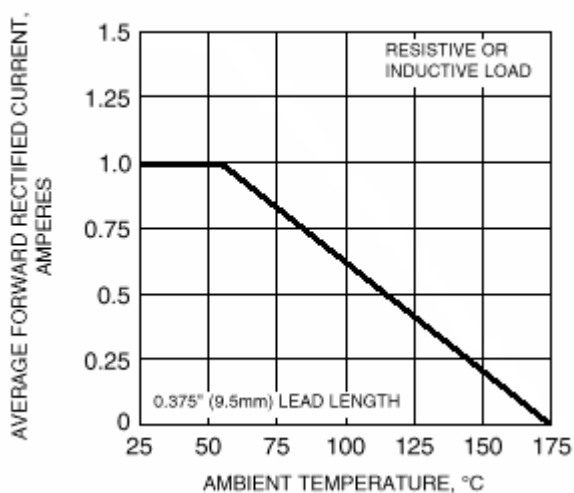
	SYMBOL	1N5617	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	400	V
Maximum RMS Voltage	$V_{RMS}$	280	V
Maximum DC blocking Voltage	$V_{DC}$	400	V
Maximum Reverse Breakdown Voltage $I_R=50\mu A$	$V_{BR}$	440	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_a=55^\circ C$	$I_{FAV}$	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 Forward Current 3.0A and 25°C	$V_F$	1.6	V
Maximum DC Reverse Current $T_a = 25^\circ C$ at rated DC blocking voltage $T_a = 100^\circ C$	$I_R$	1.0 25.0	$\mu A$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	150	nS
Typical Junction Capacitance (Note 2)	$C_j$	35.0	pF
Typical Thermal Resistance (Note 3)	$R_{th}(ja)$	45.0	$^\circ C / W$
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-65 to +175	$^\circ C$

Note:

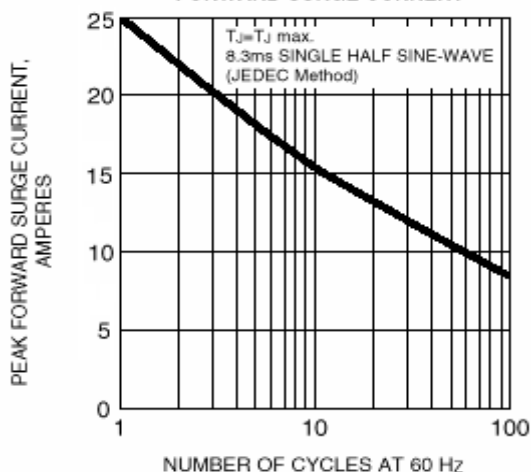
1. Reverse Recovery Condition  $I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A$
2. Measured at 1.0 MHz and applied reverse voltage of 12.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

# RATINGS AND CHARACTERISTIC CURVES 1N5617

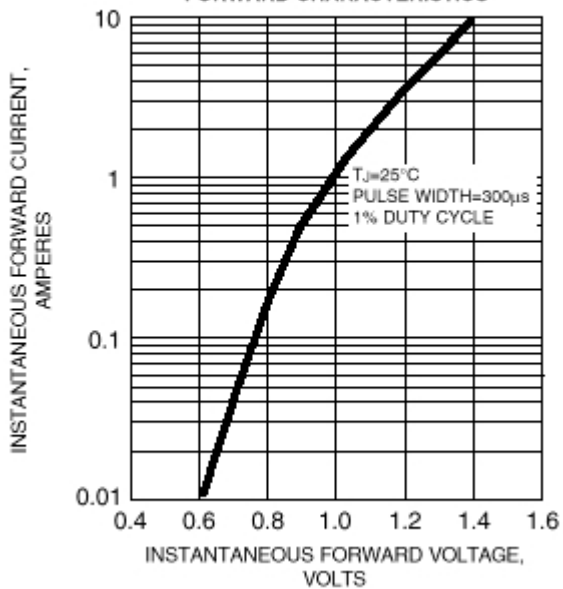
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



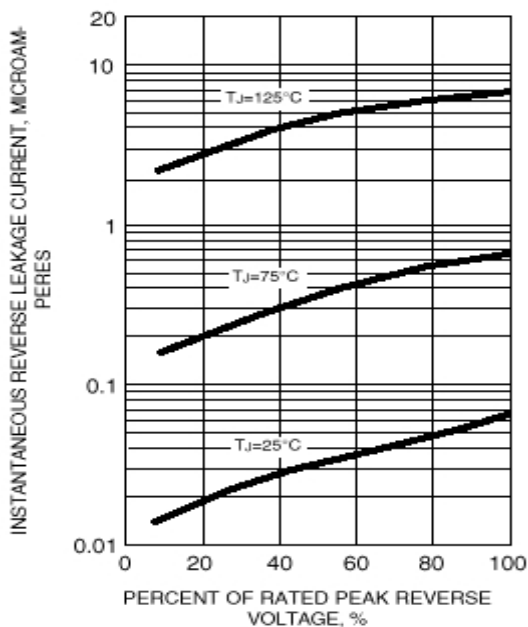
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**

