

# 1N5807 THRU 1N5809

## SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 50V TO 100V

CURRENT: 3.0A

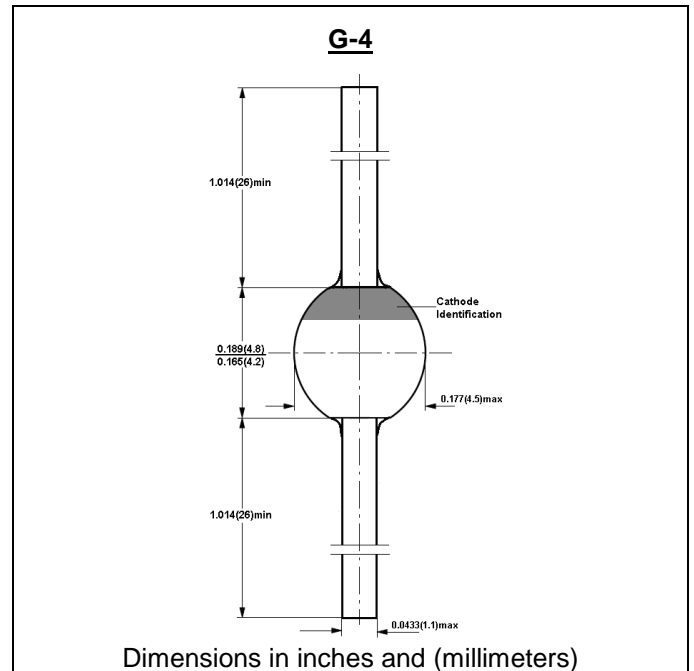


### FEATURE

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 MIL-STD 202E, method 208C  
Polarity: color band denotes cathode end  
Mounting position: any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	1N5807	1N5809	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	V
Maximum RMS Voltage	$V_{RMS}$	35	70	V
Maximum DC blocking Voltage	$V_{DC}$	50	100	V
Maximum Reverse Breakdown Voltage $I_R=100\mu A$	$V_{BR}$	60	110	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_a=55^\circ C$	$I_{FAV}$	6.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	125		A
Maximum Forward Voltage at Forward Current 4A and 25°C	$V_F$	0.875		V
Maximum DC Reverse Current $T_a = 25^\circ C$ at rated DC blocking voltage $T_a = 100^\circ C$	$I_R$	5.0 150.0		$\mu A$
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	30		nS
Typical Thermal Resistance	$R_{th(jl)}$	35.5		$^\circ C / W$
Storage and Operating Junction Temperature	$T_{stg}, T_j$	-65 to +175		$^\circ C$

Note:

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

RATINGS AND CHARACTERISTIC CURVES 1N5807 THRU 1N5809

FIG. 1 - FORWARD CURRENT DERATING CURVE

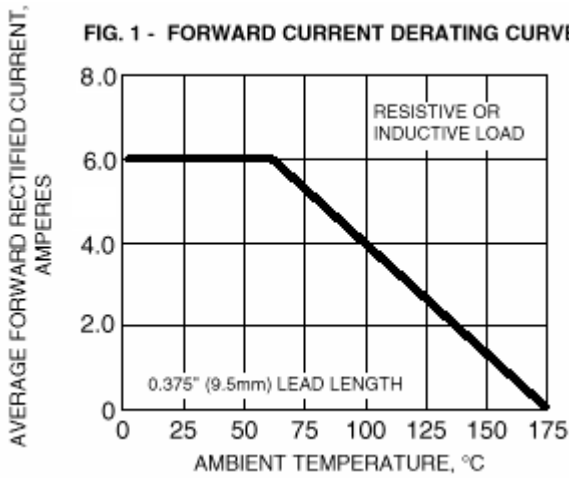


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

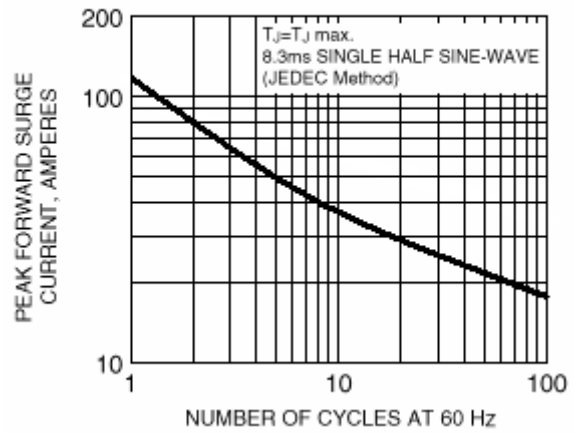


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

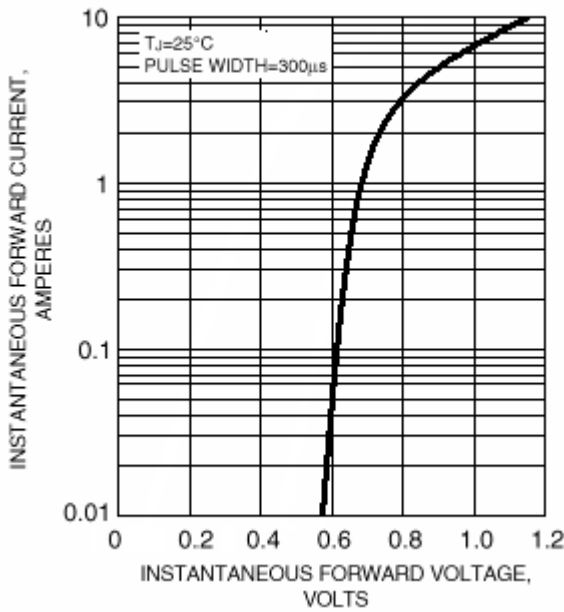


FIG. 4 - TYPICAL REVERSE CHARACTERISTIC

