

1N5811

SINTERED GLASS JUNCTION FAST AVALANCHE RECTIFIER

VOLTAGE: 150V

CURRENT: 3.0A

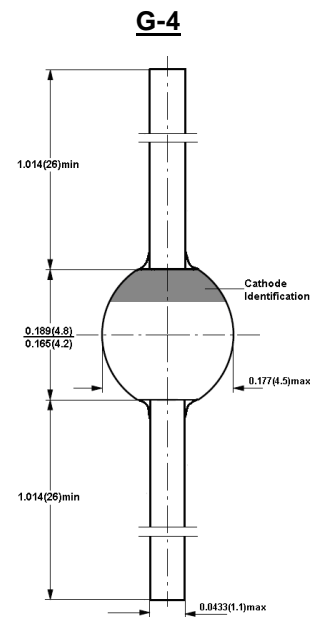


FEATURE

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



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	1N5811	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS Voltage	V_{RMS}	105	V
Maximum DC blocking Voltage	V_{DC}	150	V
Maximum Reverse Breakdown Voltage $I_R=100\mu A$	V_{BR}	160	V
Maximum Average Forward Rectified Current 3/8"lead length at $T_a=55^\circ C$	I_{FAV}	3.0	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	μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	40	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 1N5811

FIG. 1 - FORWARD CURRENT DERATING CURVE

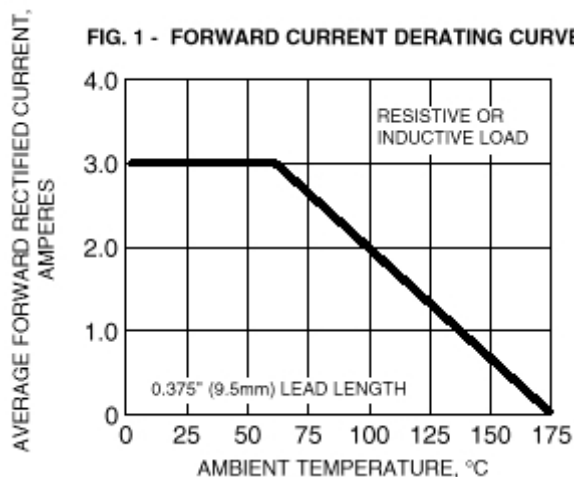


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

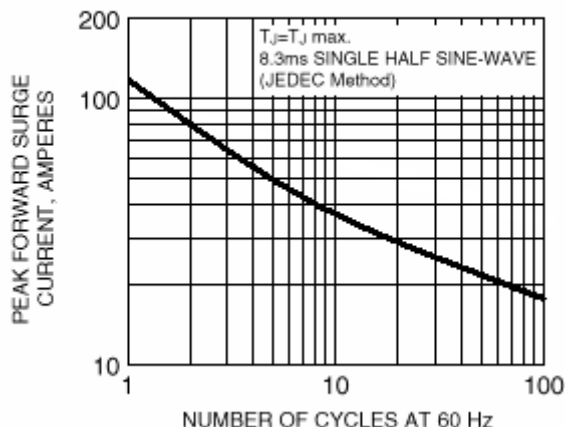


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

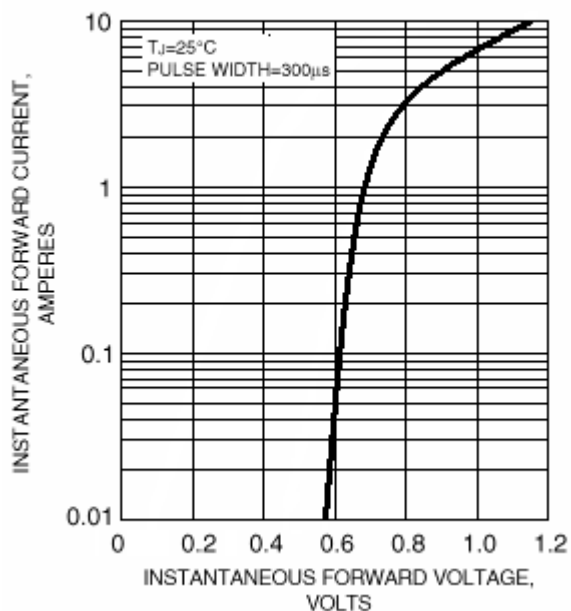


FIG. 4 - TYPICAL REVERSE CHARACTERISTIC

