1N4007G-1

GLASS PASSIVATED JUNCTION RECTIFIER

VOLTAGE: 1000V **CURRENT: 1.0A**

GULF SEMI

FEATURE

Molded case feature for auto insertion
High current capability
Low leakage current
High surge capability
High temperature soldering guaranteed
250℃ /10sec/0.375" lead length at 5 lbs tension
Glass Passivated chip

MECHANICAL DATA

Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame
Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any

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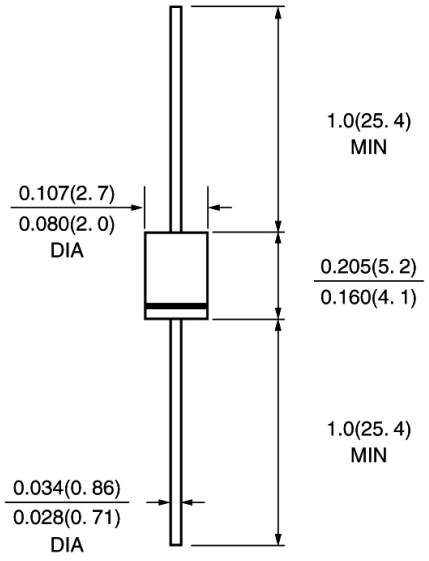

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25℃, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	1N4007G-1	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1000	V
Maximum RMS Voltage	Vrms	700	V
Maximum DC blocking Voltage	Vdc	1000	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =75℃	If(av)	1.0	A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	30.0	A
Maximum Instantaneous Forward Voltage at rated forward current	Vf	1.1	V
Maximum full load reverse current full cycle at T_L =75℃	Ir(av)	30.0	μA
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =100℃	Ir	5.0 50.0	μA
Reverse Recovery Time Range (Note 1)	Trr	900～1300	nS
Typical Junction Capacitance (Note 2)	Cj	15.0	pF
Typical Thermal Resistance (Note 3)	R(ja)	50.0	℃/W
Storage and Operation Junction Temperature	Tstg, Tj	-55 to +150	℃

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 0.375" lead length, P.C. Board Mounted

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Fig. 1 – Forward Current Derating Curve

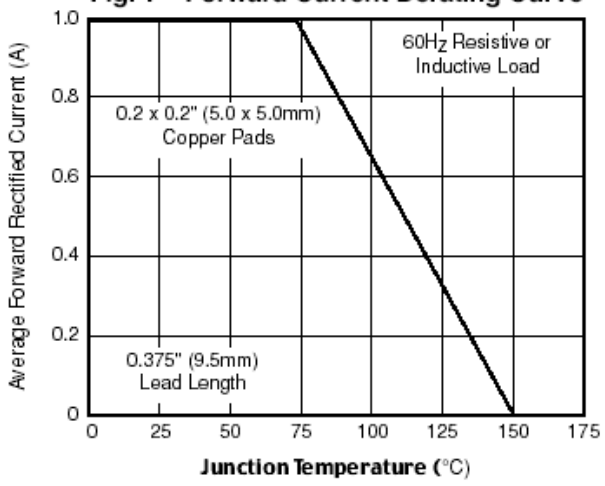


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

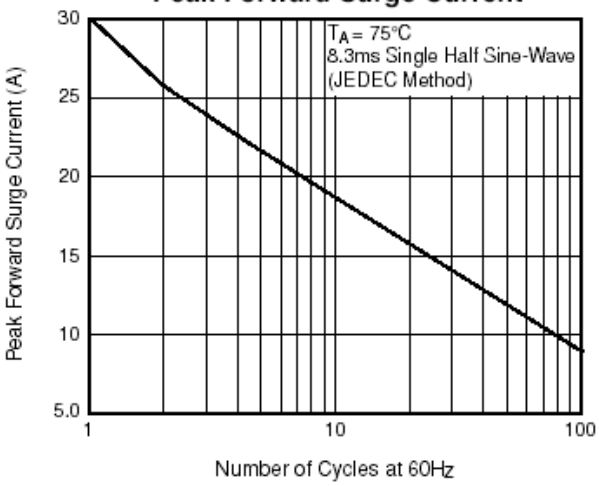


Fig. 3 – Typical Instantaneous Forward Characteristics

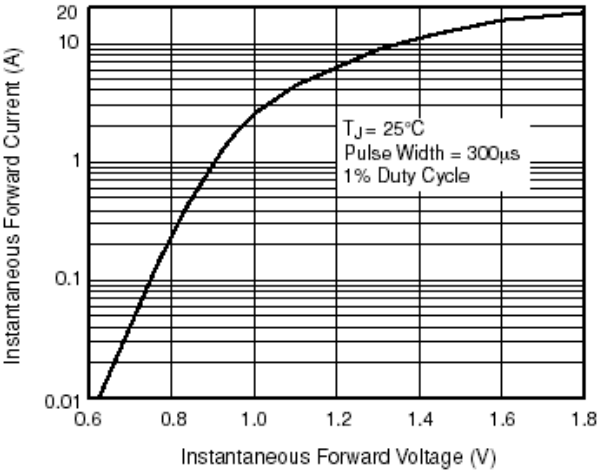


Fig. 4 – Typical Reverse Characteristics

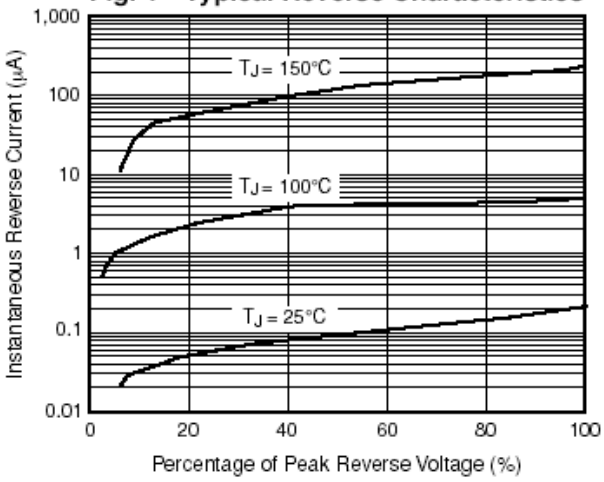


Fig. 5 – Typical Junction Capacitance

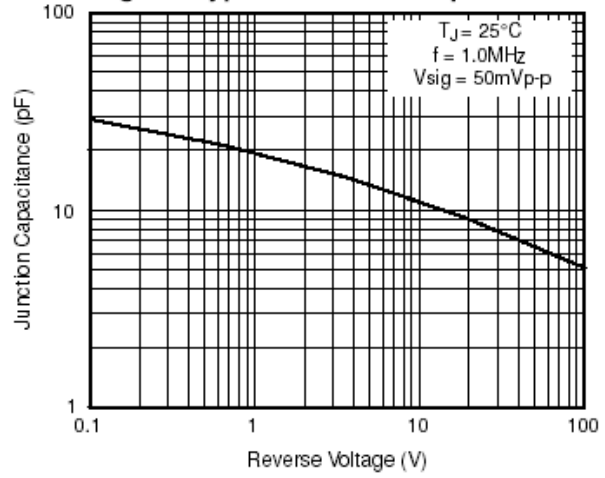
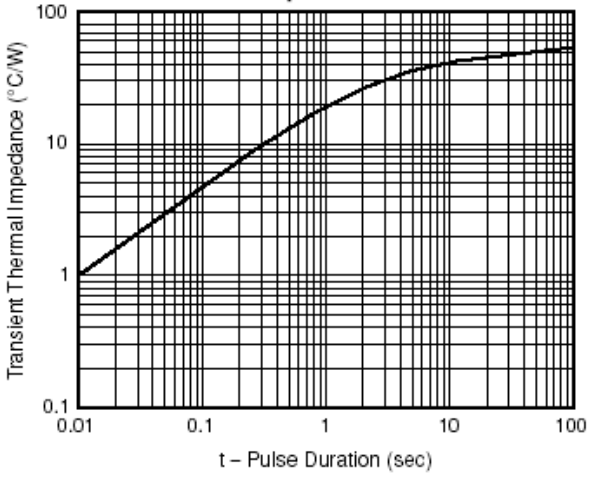


Fig. 6 – Typical Transient Thermal Impedance



[1] Rev.A1