

1N4001G~1N4007G

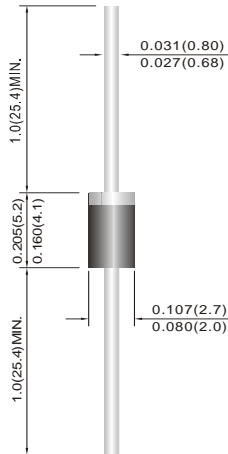
Glass Passivated General Purpose Rectifiers

VOLTAGE 50 to 1000 Volts CURRENT 1.0 Ampere



DO-41

Unit: inch(mm)



FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Exceeds environmental standards of MIL-S-19500/228
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

Case: DO-41 Molded plastic

Epoxy: UL 94V-O rate flame retardant.

Lead: Axial leads, solderable per MIL-STD-202G, Method 208 guaranteed

Polarity: Color band denotes cathode end

Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	1N4001G	1N4002G	1N4003G	1N4004G	1N4005G	1N4006G	1N4007G	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=75°C	I _{AV}	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	30							A
Maximum Forward Voltage at 1.0A	V _F	1.1							V
Maximum DC Reverse Current at TA=25°C Rated DC Blocking Voltage TA=100°C	I _R	5.0 50							uA
Typical Junction capacitance (Note 1)	C _J	15							pF
Typical Thermal Resistance(Note 2)	R _{θJA} R _{θJL}	50 25							°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient and from junction to lead at 0.375"(9.5mm)lead length P.C.B.mounted.

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RATING AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

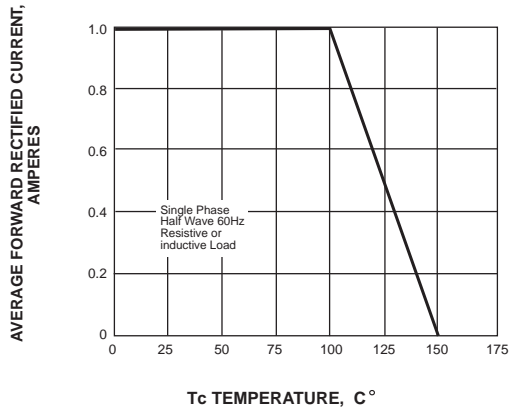


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

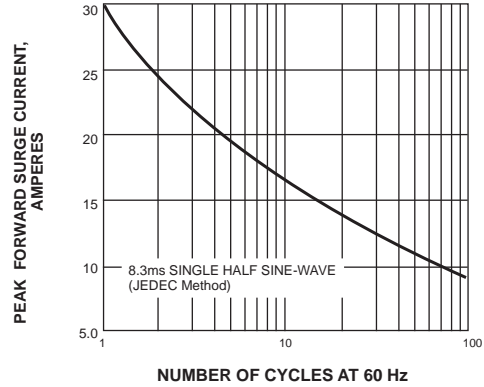


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

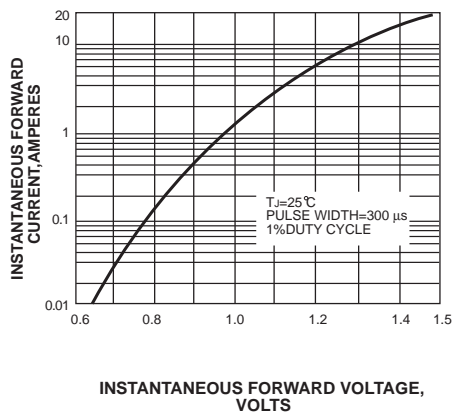


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

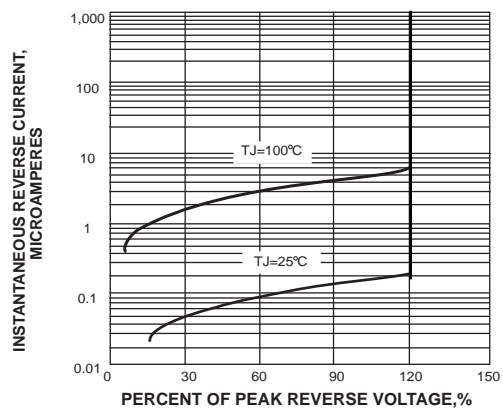


FIG. 5-TYPICAL JUNCTION CAPACITANCE

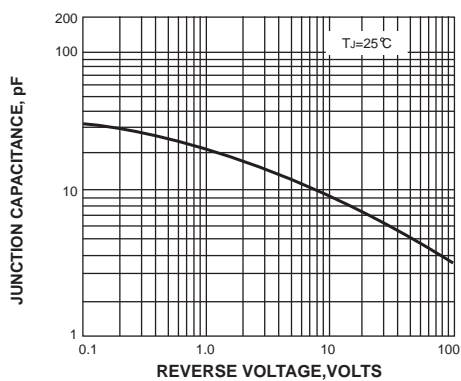


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

