



1N4001G THRU 1N4007G

GLASS PASSIVATED JUNCTION RECTIFIER

TECHNICAL
SPECIFICATION

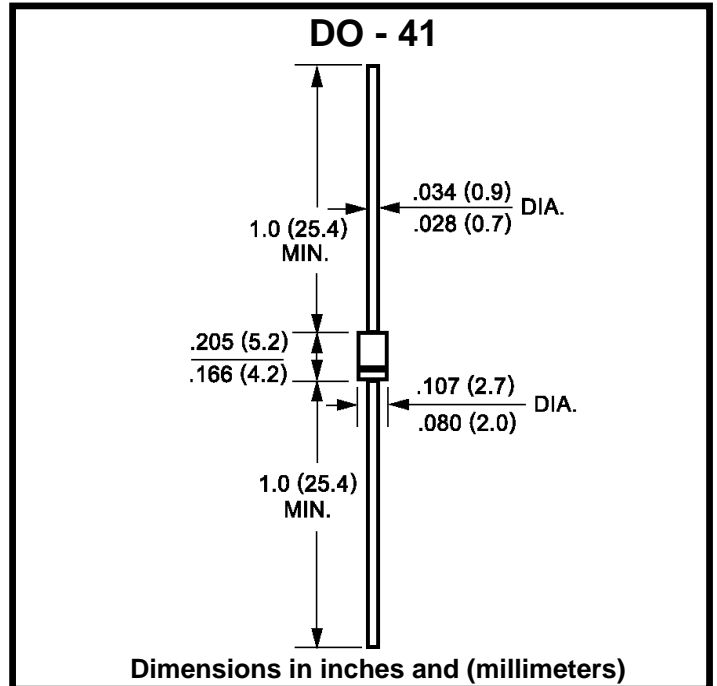
VOLTAGE: 50 TO 1000V CURRENT: 1.0A

FEATURES

- Molded case feature for auto insertion
- Glass passivated chip
- High current capability
- Low leakage current
- High surge capability
- High temperature soldering guaranteed:
250°C/10sec/0.375" (9.5mm) lead length
at 5 lbs tension

MECHANICAL DATA

- Terminal: Plated axial leads solderable per
MIL-STD 202E, method 208C
- Case: Molded with UL-94 Class V-O
recognized flame retardant epoxy
- Polarity: Color band denotes cathode
- Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60Hz, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

RATINGS	SYMBOL	1N40 01G	1N40 02G	1N40 03G	1N40 04G	1N40 05G	1N40 06G	1N40 07G	UNITS
Maximum Repetitive 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 Rectified Current (9.5mm lead length, at $T_a=75^\circ\text{C}$)	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load)	I_{FSM}	30.0							A
Maximum Instantaneous Forward Voltage (at rated forward current)	V_F	1.1							V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ (at rated DC blocking voltage) $T_a=100^\circ\text{C}$	I_R	5.0 50							μA μA
Typical Junction Capacitance (Note 1)	C_J	15.0							pF
Typical Thermal Resistance (Note 2)	$R_\theta(ja)$	50.0							$^\circ\text{C}/\text{W}$
Storage and Operation Junction Temperature	T_{STG}, T_J	-65 to +150							$^\circ\text{C}$

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0V_{dc}
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C. board mounted