

1 A Glass Passivated Junction Rectifiers

1N4001G THRU 1N4007G 50 to 1000 V 1.0 A

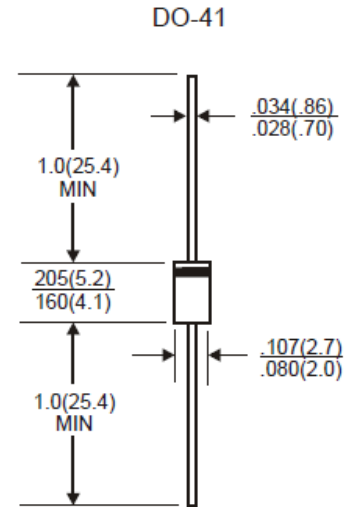
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Glass Passivated Junction Rectifiers



Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Mark Description: The white section of the diode polarity (negative) to identify, CP marking Logo, "XX" for the product category label, "YYYY" for the product type marking, "ZZZ" for use in product date code will change
- Lead: Axial leads, solder able per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed: 250°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- Weight: 0.34 gram



All dimensions inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbols	1N 4001G	1N 4002G	1N 4003G	1N 4004G	1N 4005G	1N 4006G	1N 4007G	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amp
Maximum Forward Voltage at 1.0A and $T_A=25^\circ\text{C}$	V_F	1.0							Volts
Maximum Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	I_R	5.0 50							μAmp
Maximum Full Load Reverse Current, Full Cycle Average .375" (9.5mm) Lead Length @ $T_A=75^\circ\text{C}$		30							μA
Typical Junction Capacitance (Note 1)	C_J	8							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	55							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J T_{stg}	-65 to +175							$^\circ\text{C}$

NOTES:

1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.
2. Thermal Resistance from Junction to Ambient .375" (9.5mm) Lead Length.

RATINGS AND CHARACTERISTIC CURVES (1N4001G THRU 1N4007G)

