

PLASTIC SILICON RECTIFIER

VOLTAGE RANGE: 50 TO 1000VOLTS

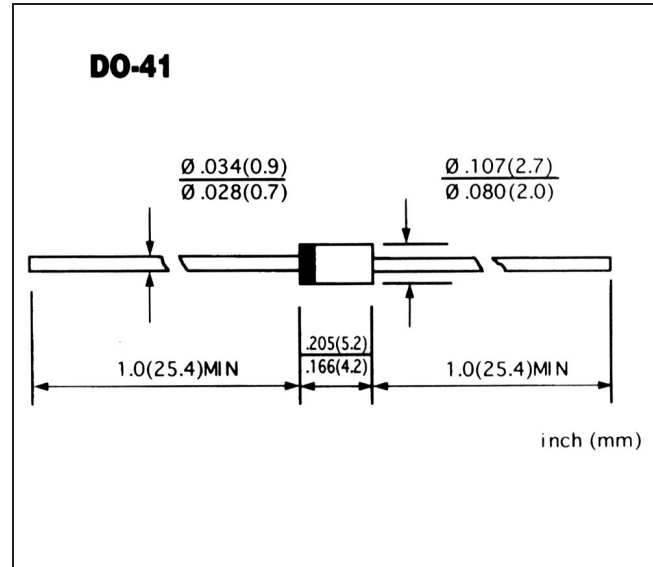
CURRENT: 1.0 AMPERES

FEATURES

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

Case: JEDEC DO-41, molded plastic
 Terminals: Axial leads, solder able per MIL-STD-202, Method 208
 Polarity: Color band denotes cathode
 Weight: 0.012 ounce, 0.34 gram
 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%.

Parameters		1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	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 Rectified Current 9.5mm Lead Length, @ $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load @ $T_J=125^\circ\text{C}$	I_{FSM}	40							A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.0							V
Maximum Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	5 50							μA
Typical Junction Capacitance (Note 1)	C_j	15							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	26							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	T_J	-65---+150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65---+150							$^\circ\text{C}$

NOTE: 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Thermal Resistance Junction to Ambient.