

Lagertyp 1N4007

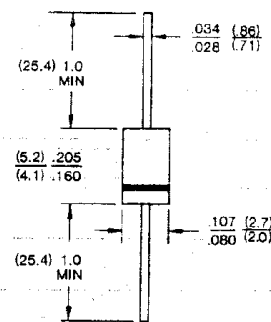
VOLTAGE RANGE

50 to 1000 PRV

CURRENT

1.0A at 75°

DO-41



All dimensions in inches and (millimeters)

FEATURES

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

MECHANICAL DATA:

Case: JEDEC DO-41, molded case
 Terminals: Plated axial leads, solderable per MIL-STD-202, Method # 208
 Polarity: Color band denotes cathode end
 Weight: 0.012 ounce, 0.3 gram
 Mounting position: Any
 Handling precautions: None

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Single-phase, half-wave, 60 Hz, resistive or inductive load

	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNITS
Maximum Recurrent Peak Reverse Voltage*	50	100	200	400	600	800	1000	V
Maximum RMS Voltage*	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage*	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8 Lead Length 75°C	1.0							A
Maximum Overload Surge Current at Rated Current & Temperature (Fig. 5)	30							A
Maximum Forward Voltage at 1.0A DC and 25°C	1.1							V
Maximum Full Load Reverse Current, Full Cycle Average at 75°C Ambient*	30							μA
Maximum DC Reverse Current at 25°C at Rated DC Blocking Voltage at 75°C	5.0 / 50.0							μA
Typical Reverse Recovery Time (Note 1)	30							μs
Typical Junction Capacitance (Note 2)	30							pF
Typical Thermal Resistance θja (Note 3)	50							°C/W
Operating and Storage Temperature Range	-65 to +175							°C

NOTES:

- 1—Measured on Tektronix Type "S" recovery plug-in, Tektronix 545 Scope or equivalent, $I_{FM} = 20mA$, $I_{RM} = 1mA$.
- 2—As measured on a Boonton Capacitance Bridge, Model 75A-SB at 1.0 MHz and applied reverse voltage of 4.0 VDC.
- 3—Thermal Resistance Junction to Ambient.

*JEDEC Registered Value

RATING AND CHARACTERISTIC CURVES 1N4001 thru 1N4007

Fig. 1—TYPICAL FORWARD CHARACTERISTICS

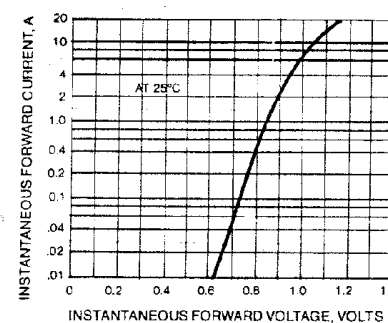


Fig. 2—JUNCTION CAPACITANCE (See Application Note 2)

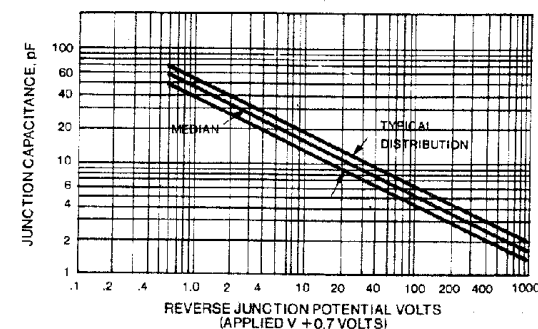


Fig. 3—MAXIMUM OVERLOAD SURGE—CURRENT

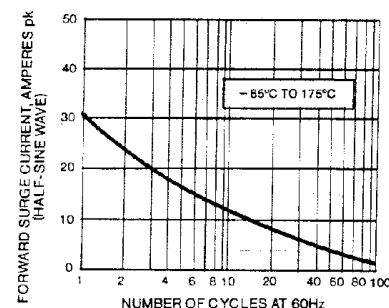


Fig. 4—PEAK FORWARD SURGE CURRENT

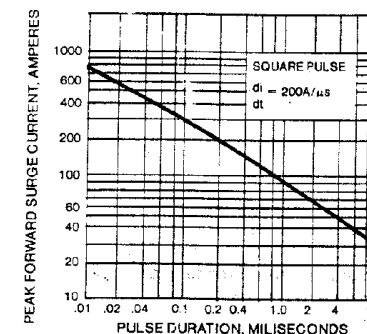


Fig. 5—FORWARD DERATING CURVE

