

New

Electronic Components  
**International** ©

International Components Corporation  
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Cable: INTECOMPCO MELV  
Telex: 221576 ICC NY

1N4001GPP THRU 1N4007GPP

*DKS*

1 AMP. GLASS PASSIVATED RECTIFIER

FEATURES

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

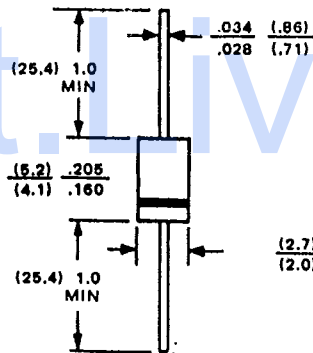
MECHANICAL DATA

Case: JEDEC DO-41, molded Plastic  
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

VOLTAGE RANGE  
50 to 1000 Volts

CURRENT  
1.0 Ampere

DO-41



All dimensions in 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%.

|   | 1N4001 GPP  | 1N4002 GPP | 1N4003 GPP | 1N4004 GPP | 1N4005 GPP | 1N4006 GPP | 1N4007 GPP | 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<br>3/8" Lead Length at T <sub>A</sub> = 75°C                        | 1.0         |            |            |            |            |            |            | A        |
| * Peak Forward Surge Current<br>8.3 ms single half sine-wave superimposed on rated load (JEDEC method)          | 50          |            |            |            |            |            |            | A        |
| * Maximum Forward Voltage at 1.0A DC  | 1.0         |            |            |            |            |            |            | V        |
| * Maximum DC Reverse Current at Rated DC Blocking Voltage<br>@ T <sub>A</sub> = 25°C<br>@ T <sub>A</sub> = 75°C | 5.0<br>50.0 |            |            |            |            |            |            | μA<br>μA |
| Typical Junction Capacitance (Note 1)   | 20          |            |            |            |            |            |            | pF       |
| Typical Thermal Resistance (Note 2)   | 50          |            |            |            |            |            |            | °C/W     |
| Operating Temperature Range   | -65 to +175 |            |            |            |            |            |            | °C       |
| Storage Temperature Range   | -65 to +175 |            |            |            |            |            |            | °C       |

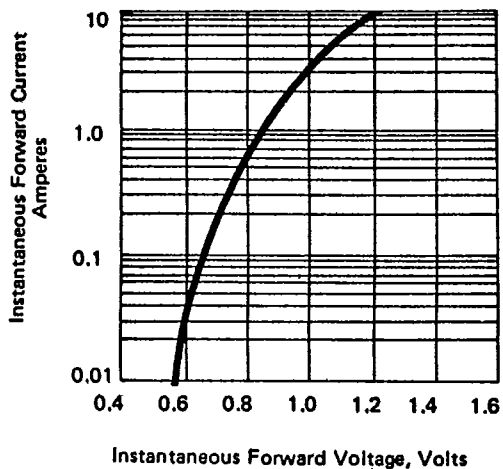
NOTES: 1. As measured on a Boonton Capacitance Bridge, Model 75A-S8 at 1.0 MHz and applied reverse voltage of 4.0V DC.  
2. Thermal Resistance Junction to Ambient.  
• JEDEC registered values.

NOTE: Special Silicon Rectifier are also available.

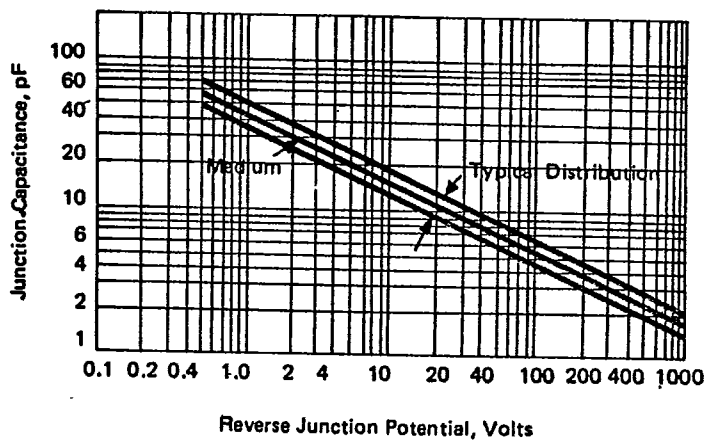


**RATING AND CHARACTERISTIC CURVES  
1N4001 thru 1N4007**

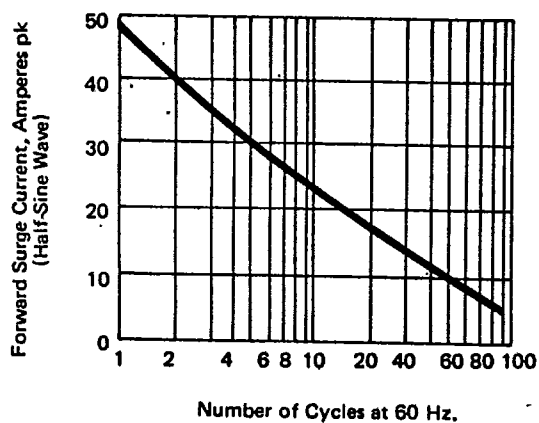
**Fig. 1 - TYPICAL FORWARD CHARACTERISTICS.**



**Fig. 2 - JUNCTION CAPACITANCE (See Application Note 1).**



**Fig. 3 - MAXIMUM OVERLOAD SURGE-CURRENT**



**Fig. 4 - FORWARD DERATING CURVE**

