

**1N5400GP
thru
1N5408GP**

**3 Amp Glass
Passivated Rectifier
50 - 1000 Volts**

Features

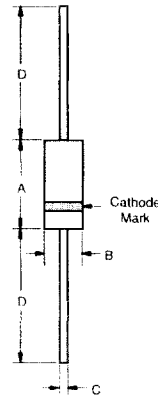
- Low Current Leakage
- Metalurgically Bonded Construction
- Low Forward Voltage
- High Current Capability
- Glass Passivated Junction

Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

| Microsemi Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------------|----------------|----------------------------------------|---------------------|-----------------------------|
| 1N5400GP | --- | 50V | 35V | 50V |
| 1N5401GP | --- | 100V | 70V | 100V |
| 1N5402GP | --- | 200V | 140V | 200V |
| 1N5404GP | --- | 400V | 280V | 400V |
| 1N5406GP | --- | 600V | 420V | 600V |
| 1N5407GP | --- | 800V | 560V | 800V |
| 1N5408GP | --- | 1000V | 700V | 1000V |

DO-201AD



Electrical Characteristics @ 25°C Unless Otherwise Specified

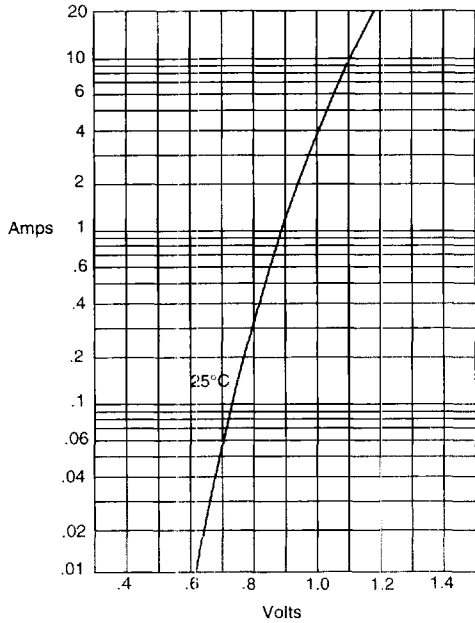
| | | | |
|---------------------------------------------------------|-------------|---------------------------------------|-------------------------------------------------------|
| Average Forward Current | $I_{F(AV)}$ | 3.0A | $T_A = 105^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 200A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | 1.1V | $I_{FM} = 3.0\text{A}; T_J = 25^\circ\text{C}^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 5.0 μA 50 μA | $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ |
| Typical Junction Capacitance | C_J | 40pF | Measured at 1.0MHz, $V_R=4.0\text{V}$ |

*Pulse test: Pulse width 300 μsec , Duty cycle 1%

| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | --- | .370 | --- | 9.50 | |
| B | --- | .250 | --- | 6.40 | |
| C | .048 | .052 | 1.20 | 1.30 | |
| D | 1.000 | --- | 25.40 | --- | |

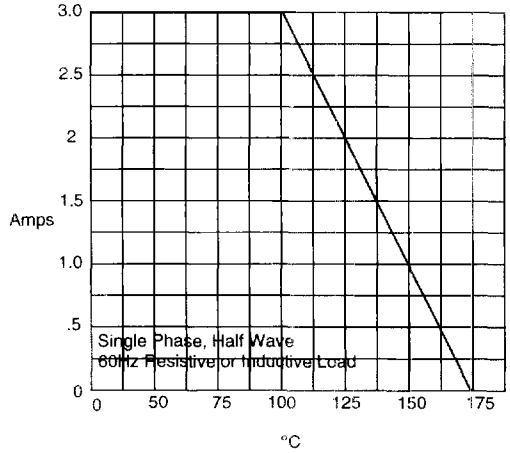
1N5400GP thru 1N5408GP

Figure 1
Typical Forward Characteristics



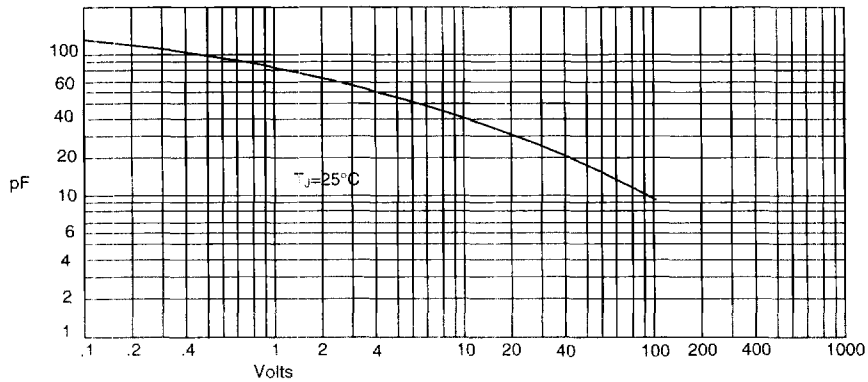
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

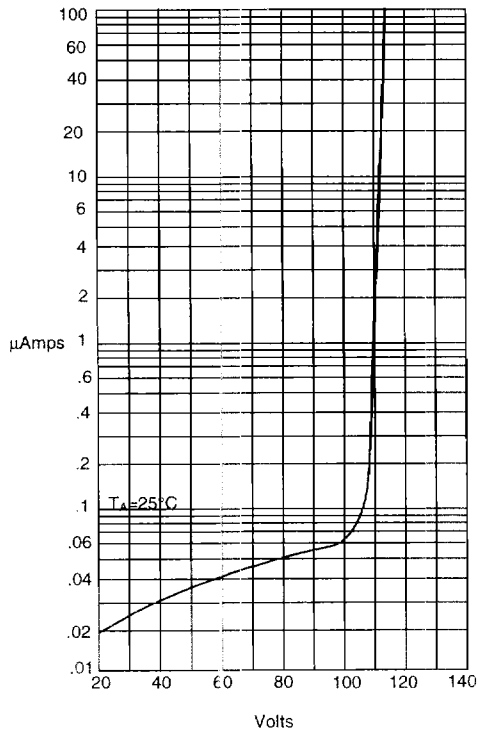
Figure 3
Junction Capacitance



Junction Capacitance - pF versus
Reverse Voltage - Volts

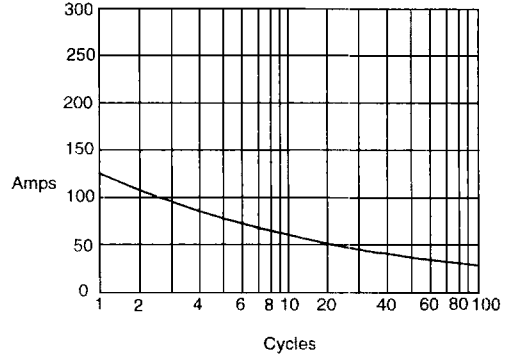
1N5400GP thru 1N5408GP

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus Number Of Cycles At 60Hz - Cycles