



# 1N5400G THRU 1N5408G

## GLASS PASSIVATED JUNCTION RECTIFIER

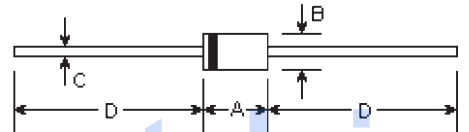
Reverse Voltage - 50 to 1000 Volts

Forward Current - 3.0 Amperes

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction
- Capable of meeting environmental standards of MIL-S-19500
- 3.0 ampere operation at  $T_A=105^\circ\text{C}$  with no thermal runaway
- Typical  $I_R$  less than  $0.1 \mu\text{A}$
- High temperature soldering guaranteed:  $350^\circ\text{C}/10$  seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3Kg) tension

### DO-201AD



### Mechanical Data

- **Case:** DO-201AD molded plastic over glass body
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any
- **Weight:** 0.042 ounce, 1.195 grams

DIM	DIMENSIONS				Note
	inches		mm		
	Min.	Max.	Min.	Max.	
A	0.283	0.374	7.20	9.50	
B	0.189	0.208	4.80	5.30	ϕ
C	0.048	0.051	1.20	1.30	ϕ
D	1.000	-	25.40	-	

### Maximum Ratings and Electrical Characteristics @25°C unless otherwise specified

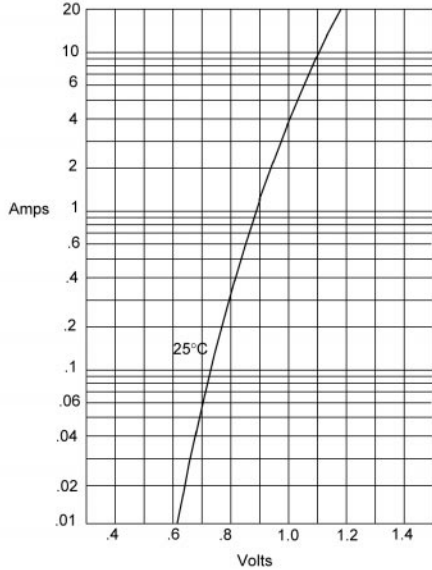
	Symbols	1N 5400G	1N 5401G	1N 5402G	1N 5404G	1N 5406G	1N 5407G	1N 5408G	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Average forward current $T_A=105^\circ\text{C}$	$I_{F(AV)}$	3.0							Amps
Peak forward surge current 8.3mS half sine-wave	$I_{FSM}$	200.0							Amps
Maximum instantaneous forward voltage $I_F=3.0\text{A}; T_J=25^\circ\text{C}$ (Note 1)	$V_F$	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	5.0 50.0							$\mu\text{A}$
Typical junction capacitance Measure at 1.0MHz, $V_R=4.0\text{V}$	$C_J$	40							$\mu\text{F}$
Typical thermal resistance	$R_{\theta JA}$	30							$^\circ\text{C}/\text{W}$
Operating and storage temperature range	$T_J, T_{STG}$	-65 to +175							$^\circ\text{C}$

Note:

(1) Pulse test: Pulse width 300uSec, Duty cycle 1%

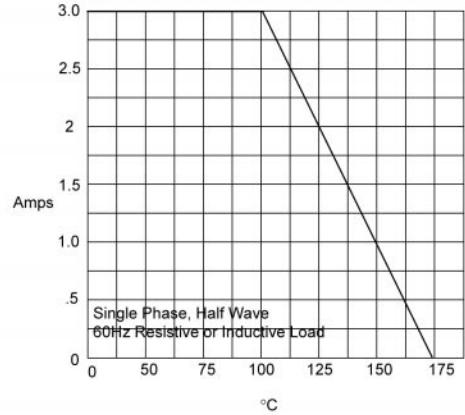
# RATINGS AND CHARACTERISTIC CURVES

Figure 1  
Typical Forward Characteristics



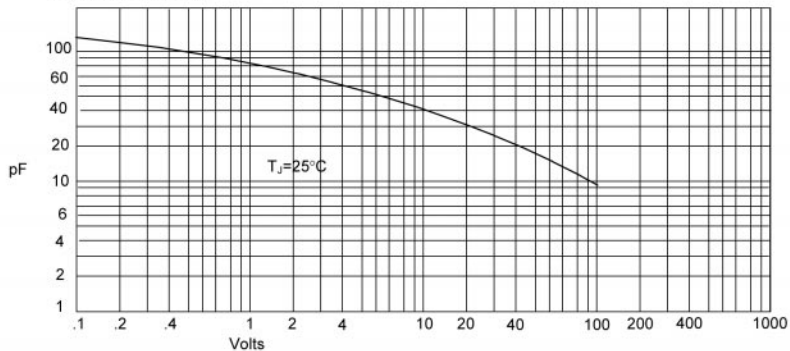
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



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

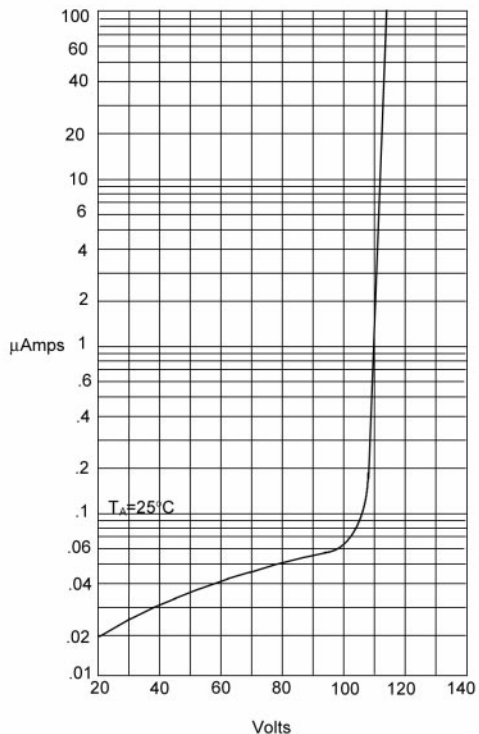
Figure 3  
Junction Capacitance



Junction Capacitance - pF *versus*  
Reverse Voltage - Volts

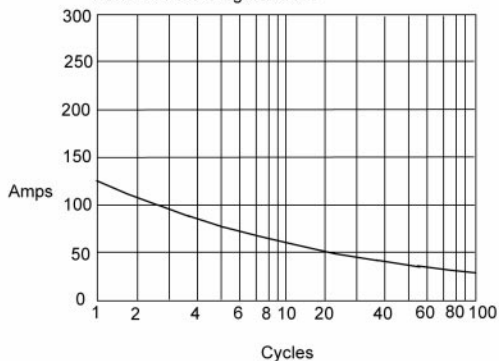
# RATINGS AND CHARACTERISTIC CURVES

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