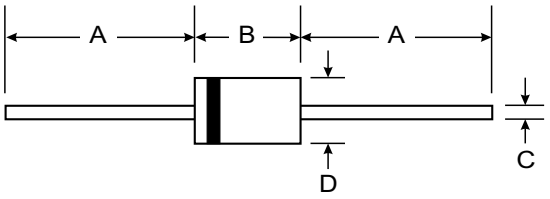
1N5400G - 1N5408G

3.0A GLASS PASSIVATED RECTIFIER

Features

- Glass Passivated Die Construction
- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 125A Peak
- Plastic Material has UL Flammability Classification 94V-0



Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.12 grams (approx)
- Mounting Position: Any
- Marking: Type Number

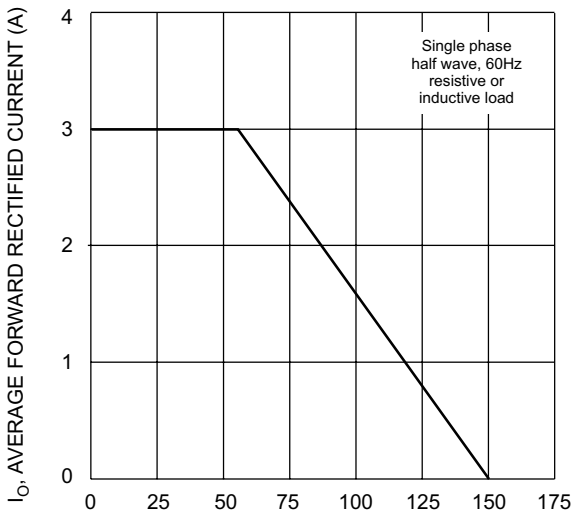
DO-201AD		
Dim	**Min**	**Max**
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

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

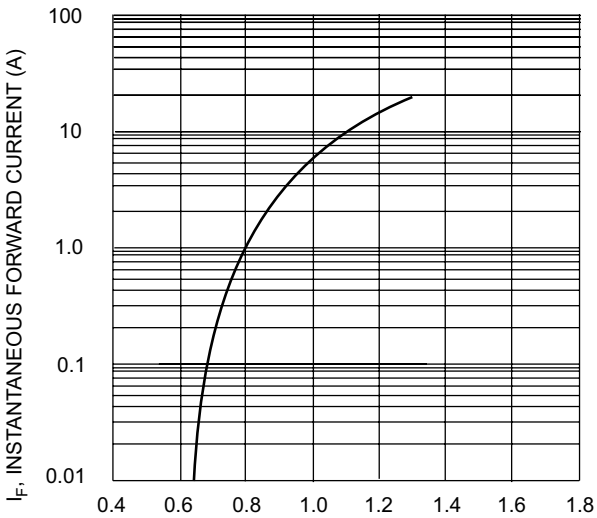
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	1N 5400G	1N 5401G	1N 5402G	1N 5403G	1N 5404G	1N 5405G	1N 5406G	1N 5407G	1N 5408G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	300	400	500	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	350	420	580	700	V
Average Rectified Output Current (Note 1) @ T_A = 55°C	I_O	3.0									A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125									A
Forward Voltage @ I_F = 3.0A	V_{FM}	1.1									V
Peak Reverse Current @T_A = 25°C at Rated DC Blocking Voltage @ T_A = 125°C	I_{RM}	5.0 100									μA
Reverse Recovery Time (Note 3)	t_{rr}	2.0									μs
Typical Junction Capacitance (Note 2)	C_j	40									pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	32									K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150									°C

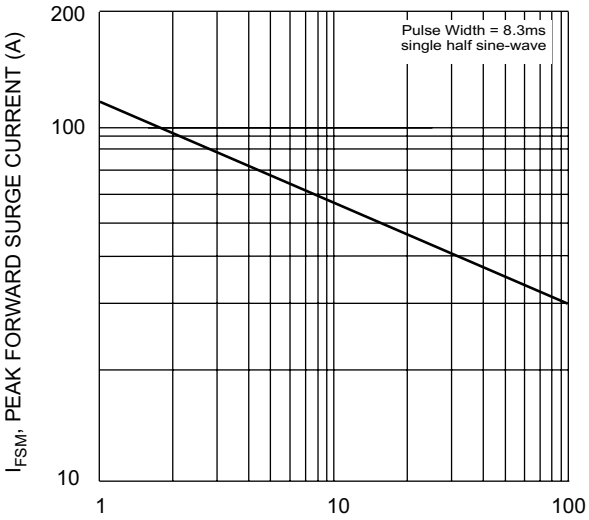
Notes: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
3. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.



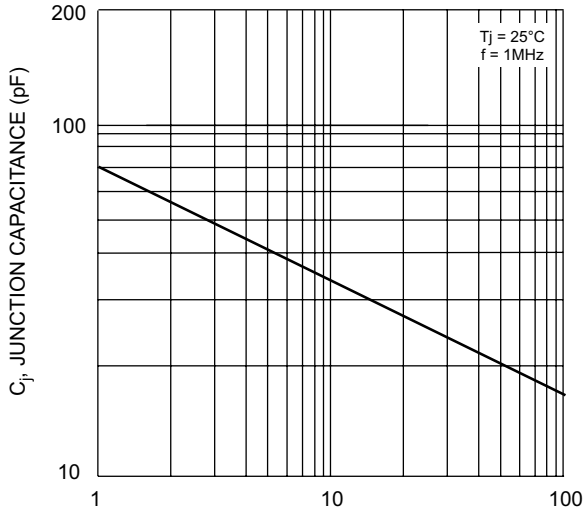
T_A, AMBIENT TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



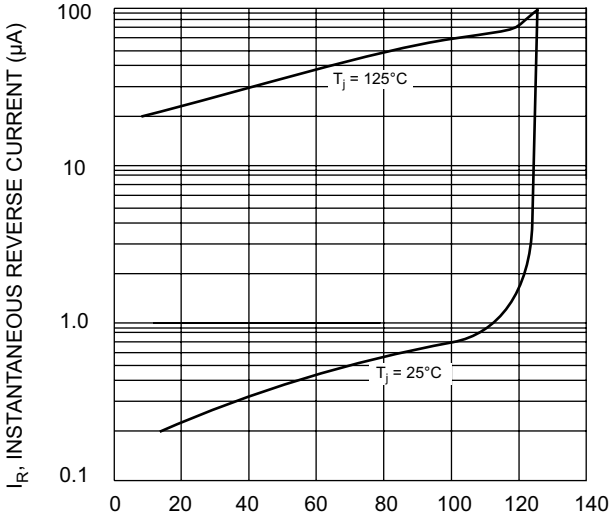
V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Peak Forward Surge Current



V_R, REVERSE VOLTAGE (V)
Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK VOLTAGE (%)
Fig. 5 Typical Reverse Characteristics