



# 1N5400G THRU 1N5408G

GENERAL PURPOSE PLASTIC SILICON RECTIFIER

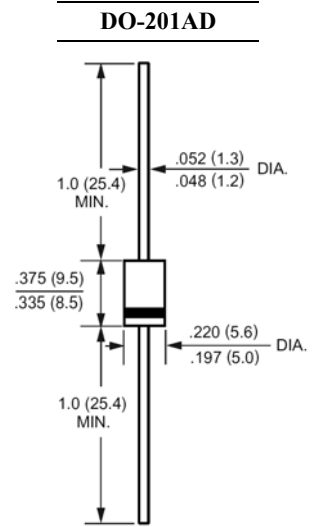
**REVERSE VOLTAGE:** 50 to 1000 VOLTS  
**FORWARD CURRENT:** 3.0 AMPERES

## FEATURES

- High current capability
- Plastic package has Underwriters Laboratory
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage.
- Glass Passivated Die Construction
- Suffix "H" indicates Halogen-free parts, ex. 1N5400GH

## MECHANICAL DATA

Case : Molded plastic, DO-201AD  
 Epoxy : UL 94V-O rate flame retardant  
 Lead : Axial leads, solderable per MIL-STD-202, method 208 guaranteed  
 Polarity : Color band denotes cathode end  
 Mounting position : Any



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%.

Parameter	Symbols	1N5400G	1N5401G	1N5402G	1N5403G	1N5404G	1N5406G	1N5407G	1N5408G	Units
Maximum Recerrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	600	800	1000	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length	$I_{(AV)}$	3.0								Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150.0								Amp
Maximum Forward Voltage at 3.0A DC and 25 °C	$V_F$	1.1								Volts
Maximum Reverse Current at Rated DC Blocking Voltage	$I_R$	5.0 100								uAmp
Typical Junction Capacitance (Note 1)	$C_J$	50								pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40.0								°C/W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150								°C

### NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted with 0.8x0.8" (20x20mm) copper pads.



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## RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

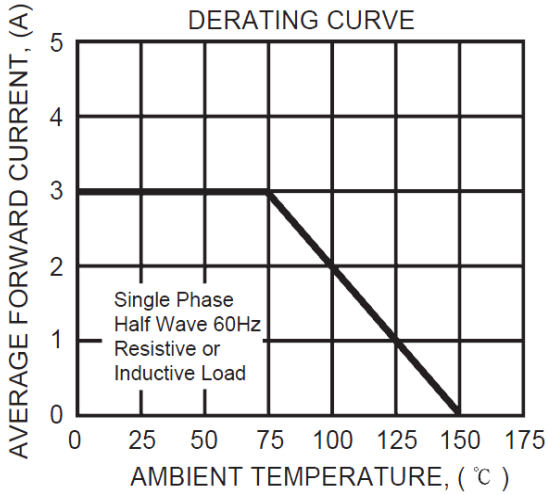


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

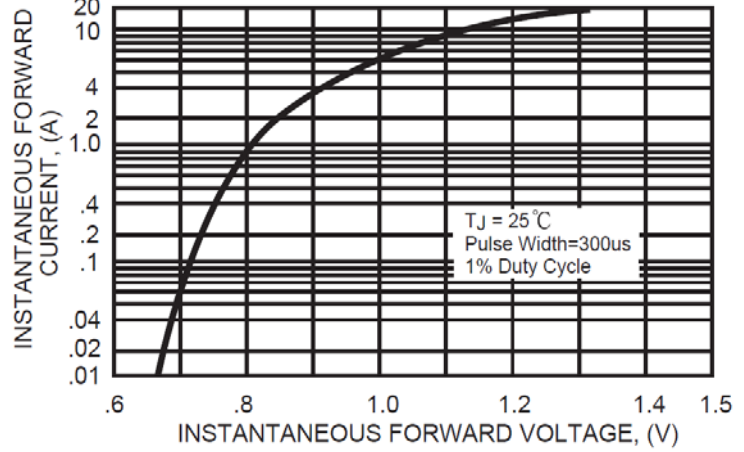


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

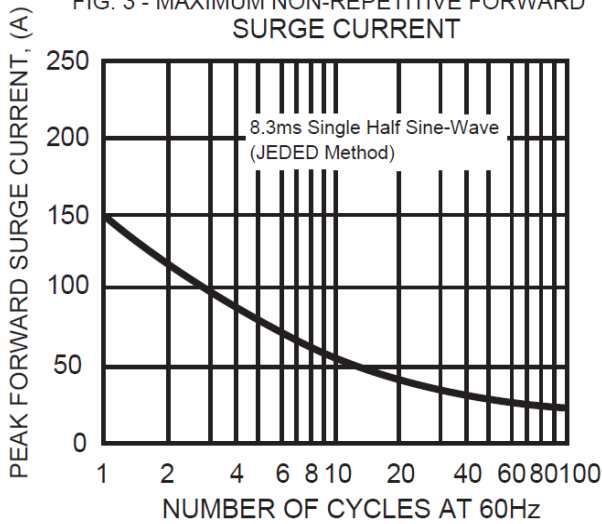


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

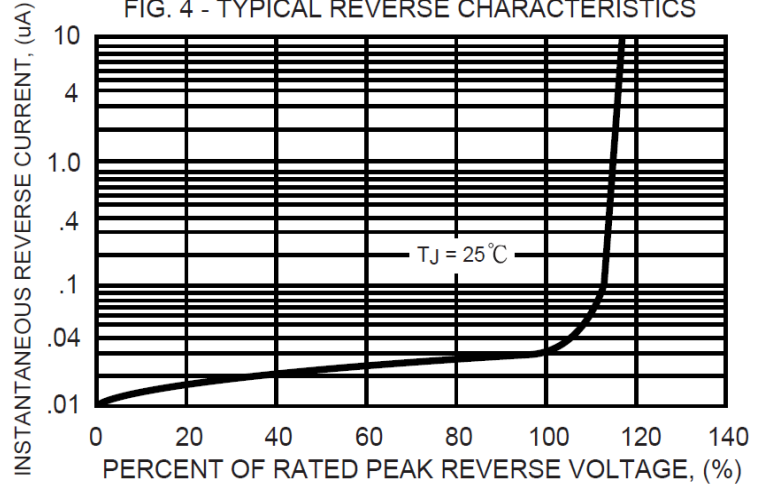


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

