

# 1N5400G - 1N5408G

## GLASS PASSIVATED JUNCTION SILICON RECTIFIERS

**PRV : 50 - 1000 Volts**

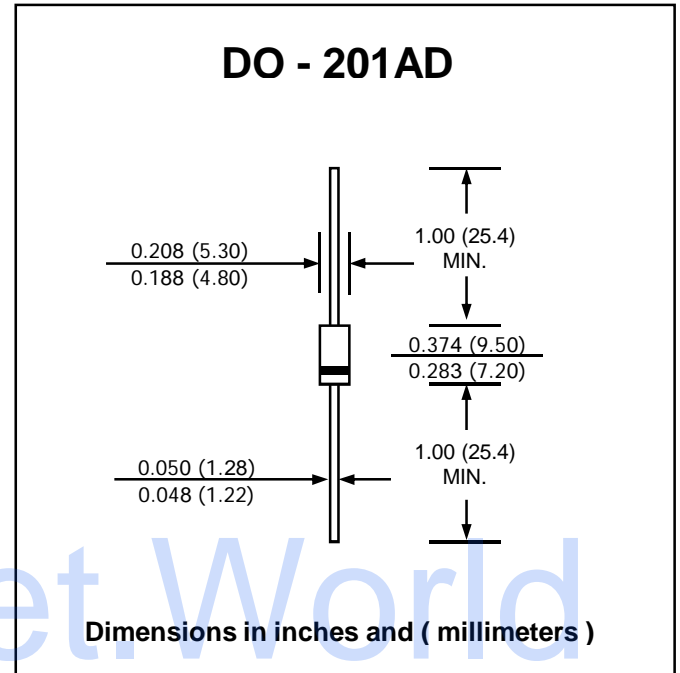
**Io : 3.0 Amperes**

### FEATURES :

- \* Glass passivated chip
- \* High current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : DO-201AD Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 1.16 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specific.  
Single phase, half wave, 60 Hz, resistive or inductive load  
For capacitive load, derate current by 20%

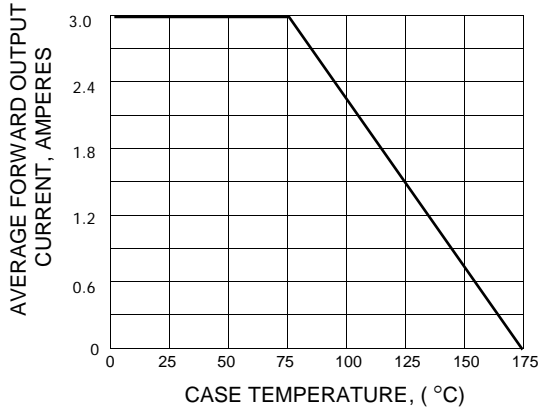
RATING	SYMBOL	1N5400G	1N5401G	1N5402G	1N5404G	1N5406G	1N5407G	1N5408G	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 75 °C	I <sub>F(AV)</sub>	3.0							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150							A
Maximum Forward Voltage at I <sub>F</sub> = 3.0 Amps.	V <sub>F</sub>	1.0							V
Maximum DC Reverse Current Ta = 25 °C	I <sub>R</sub>	5.0							μA
at rated DC Blocking Voltage Ta = 100 °C	I <sub>R(H)</sub>	50							μA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	50							pF
Typical Thermal Resistance (Note2)	R <sub>θJA</sub>	15							°C/W
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175							°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175							°C

#### Notes :

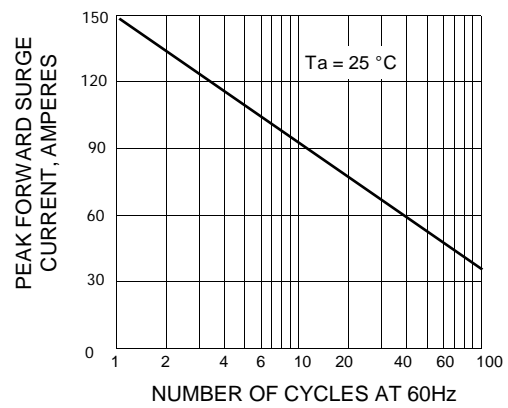
- (1) Measured at 1.0 MHz and applied reverse voltage of 0Vdc
- (2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

**RATING AND CHARACTERISTIC CURVES ( 1N5400G - 1N5408G )**

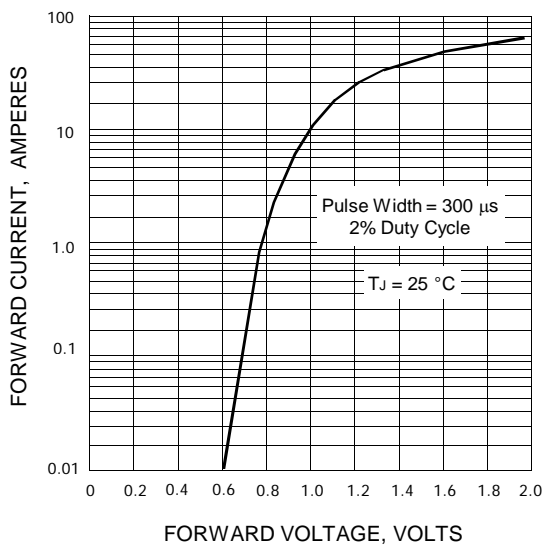
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



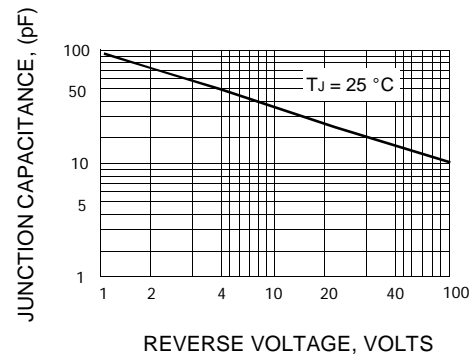
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL JUNCTION CAPACITANCE**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

