

**GLASS PASSIVATED RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 3.0 Amperes**

**FEATURES**

- \* Low cost
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* P/N suffix V means AEC-Q101 qualified, e.g:1N5400GV
- \* P/N suffix V means Halogen-free

**MECHANICAL DATA**

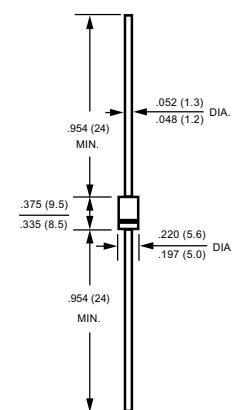
- \* Case: Molded plastic
- \* Epoxy: Device has UL flammability classification 94V-O
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any
- \* Weight: 1.2 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



**DO-201AD**



**MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)**

| RATINGS                                                                                           | SYMBOL                            | 1N5400G      | 1N5401G | 1N5402G | 1N5404G | 1N5406G | 1N5407G | 1N5408G | UNITS            |
|---------------------------------------------------------------------------------------------------|-----------------------------------|--------------|---------|---------|---------|---------|---------|---------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                            | V <sub>RRM</sub>                  | 50           | 100     | 200     | 400     | 600     | 800     | 1000    | Volts            |
| Maximum RMS Voltage                                                                               | V <sub>RMS</sub>                  | 35           | 70      | 140     | 280     | 420     | 560     | 700     | Volts            |
| Maximum DC Blocking Voltage                                                                       | V <sub>DC</sub>                   | 50           | 100     | 200     | 400     | 600     | 800     | 1000    | Volts            |
| Maximum Average Forward Rectified Current at T <sub>L</sub> = 105°C                               | I <sub>O</sub>                    | 3.0          |         |         |         |         |         |         | Amps             |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I <sub>FSM</sub>                  | 200          |         |         |         |         |         |         | Amps             |
| Typical Current Squared Time                                                                      | I <sup>2</sup> T                  | 166          |         |         |         |         |         |         | A <sup>2</sup> S |
| Typical ThermalResistance(Note2)                                                                  | R <sub>θJA</sub>                  | 20           |         |         |         |         |         |         | °C/W             |
|                                                                                                   | R <sub>θJL</sub>                  | 5.0          |         |         |         |         |         |         |                  |
| TypicalJunctionCapitance(Note1)                                                                   | C <sub>J</sub>                    | 30           |         |         |         |         |         |         | pF               |
| Operating and Storage Temperature Range                                                           | T <sub>J</sub> , T <sub>STG</sub> | -55 to + 150 |         |         |         |         |         |         | °C               |

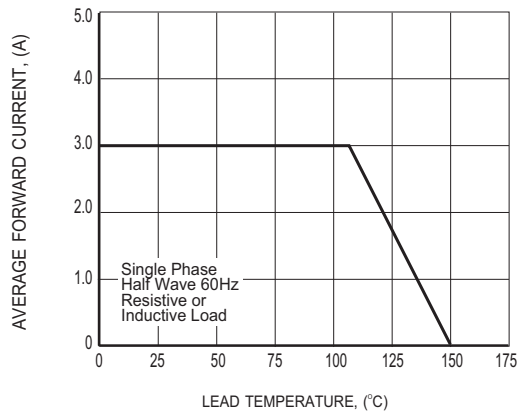
**ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)**

| CHARACTERISTICS                                         | SYMBOL                  | 1N5400G | 1N5401G | 1N5402G | 1N5404G | 1N5406G | 1N5407G | 1N5408G | UNITS |
|---------------------------------------------------------|-------------------------|---------|---------|---------|---------|---------|---------|---------|-------|
| Maximum Instantaneous Forward Voltage at 3.0A DC        | V <sub>F</sub>          | .98     |         |         |         |         |         |         | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @T <sub>A</sub> = 25°C  | 0.5     |         |         |         |         |         |         | uAmps |
|                                                         | @T <sub>A</sub> =150 °C | 2       |         |         |         |         |         |         | mAmps |

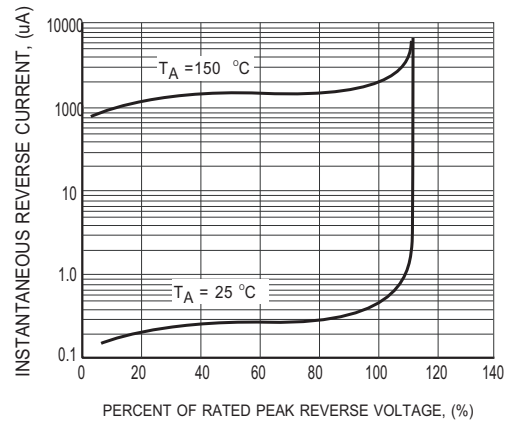
NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
2. Typical Thermal Resistance : At 9.5mm lead lengths,PCB mounted.

2020-04  
REV:D

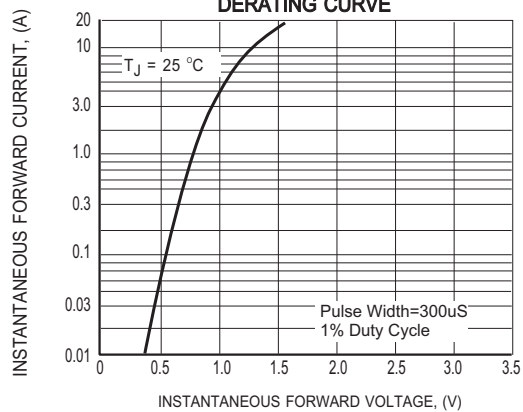
## RATING AND CHARACTERISTICS CURVES ( 1N5400G THRU 1N5408G)



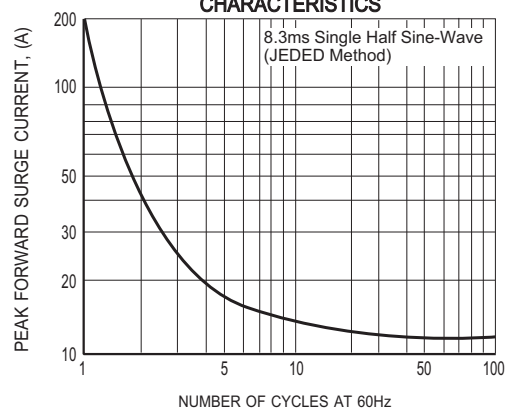
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



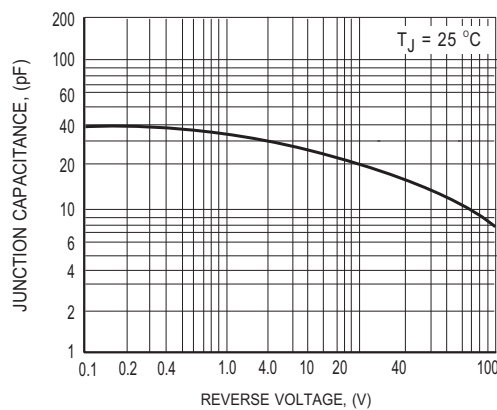
**FIG.2 MAXIMUM REVERSE CHARACTERISTICS**



**FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS**

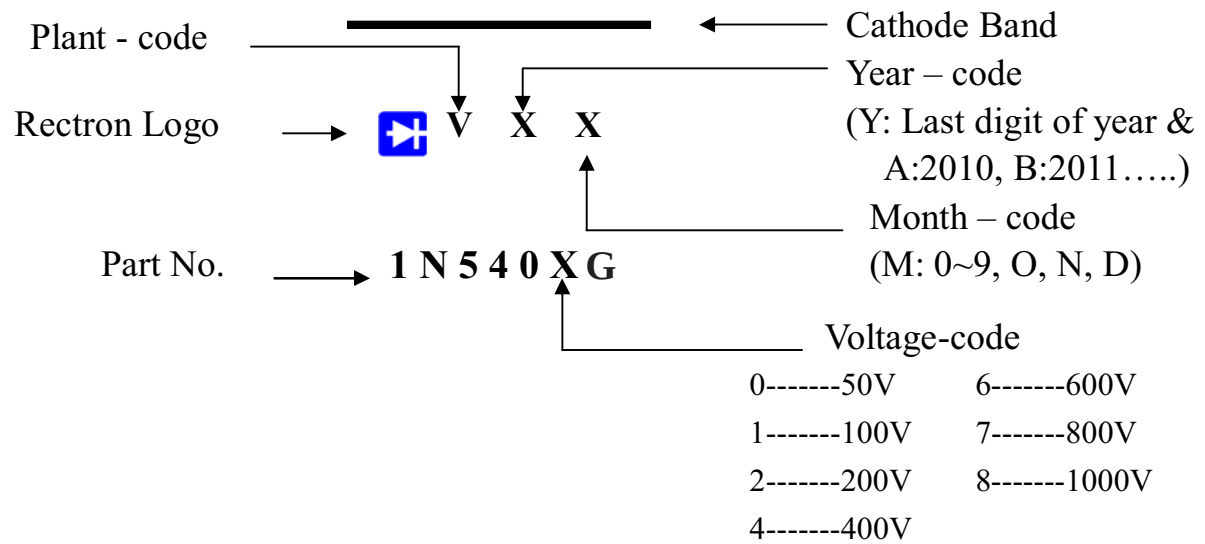


**FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.5 TYPICAL JUNCTION CAPACITANCE**

## Marking Description



## PACKAGING OF DIODE AND BRIDGE RECTIFIERS

### BULK PACK

| PACKAGE | PACKING CODE | EA PER BOX | INNER BOX SIZE<br>(mm) | CARTON SIZE<br>(mm) | EA PER CARTON | GROSS<br>WEIGHT(Kg) |
|---------|--------------|------------|------------------------|---------------------|---------------|---------------------|
| DO-201  | -B           | 500        | 300*73*40              | 347*320*271         | 12,000        | 15.9                |

### REEL PACK

| PACKAGE | PACKING<br>CODE | EA PER<br>REEL | EA PER<br>INNER<br>BOX | COMPONENT<br>SPACE<br>(mm) | TAPE SPACE<br>(mm) | REEL DIA<br>(mm) | CARTON SIZE<br>(mm) | EA PER<br>CARTON | GROSS<br>WEIGHT(Kg) |
|---------|-----------------|----------------|------------------------|----------------------------|--------------------|------------------|---------------------|------------------|---------------------|
| DO-201  | -T              | 1,200          | 1,200                  | 5.0                        | 52                 | 330              | 355*350*335         | 4,800            | 9.10                |

### AMMO PACK

| PACKAGE | PACKING<br>CODE | REEL<br>( EA ) | COMPONENT<br>SPACE(mm) | TAPE SPACE<br>(mm) | BOX SIZE<br>(mm) | CARTON<br>SIZE(mm) | CARTON<br>( EA ) | GROSS<br>WEIGHT (Kg) |
|---------|-----------------|----------------|------------------------|--------------------|------------------|--------------------|------------------|----------------------|
| DO-201  | -F              | 600            | 9.5                    | 52                 | 255*73*100       | 400*268*225        | 6,000            | 9.9                  |

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