



**DC COMPONENTS CO., LTD.**

RECTIFIER SPECIALISTS

**1N5400G  
THRU  
1N5408G**

**TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED RECTIFIER**

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 3.0 Amperes

**FEATURES**

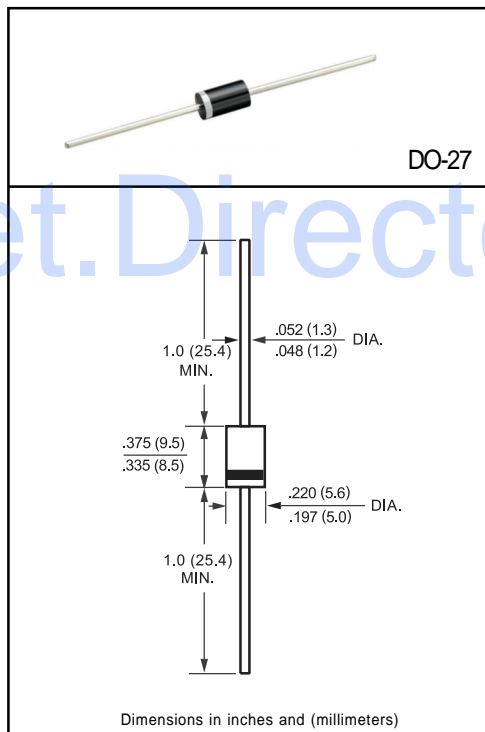
- \* High reliability
- \* Low leakage
- \* Low forward voltage drop
- \* High current capability
- \* Glass passivated junction

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.18 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%.



|  | SYMBOL                            | 1N5400G | 1N5401G | 1N5402G | 1N5404G | 1N5406G     | 1N5407G | 1N5408G | UNITS |       |
|--|-----------------------------------|---------|---------|---------|---------|-------------|---------|---------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage   | VRRM                              | 50      | 100     | 200     | 400     | 600         | 800     | 1000    | Volts |       |
| Maximum RMS Voltage  | VRMS                              | 35      | 70      | 140     | 280     | 420         | 560     | 700     | Volts |       |
| Maximum DC Blocking Voltage  | Vdc                               | 50      | 100     | 200     | 400     | 600         | 800     | 1000    | Volts |       |
| Maximum Average Forward Rectified Current<br>.375"(9.5mm) lead length 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<br>superimposed on rated load (JEDEC Method)       | I <sub>FSM</sub>                  |         |         |         |         | 200         |         |         |       | Amps  |
| Maximum Instantaneous Forward Voltage at 3.0A DC   | V <sub>F</sub>                    |         |         |         |         | 1.1         |         |         |       | Volts |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage   | I <sub>R</sub>                    |         |         |         |         | 5.0         |         |         |       | uAmps |
|  |                                   |         |         |         |         | 300         |         |         |       |       |
| Maximum Full Load Reverse Current Average, Full Cycle<br>.375"(9.5mm) lead length at T <sub>L</sub> = 75°C |                                   |         |         |         |         | 30          |         |         |       | uAmps |
| Typical Junction Capacitance (Note)  | C <sub>J</sub>                    |         |         |         |         | 40          |         |         |       | pF    |
| Typical Thermal Resistance   | R <sub>θJA</sub>                  |         |         |         |         | 30          |         |         |       | °C/W  |
| Operating and Storage Temperature Range  | T <sub>J</sub> , T <sub>STG</sub> |         |         |         |         | -65 to +175 |         |         |       | °C    |

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES (1N5400G THRU 1N5408G)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

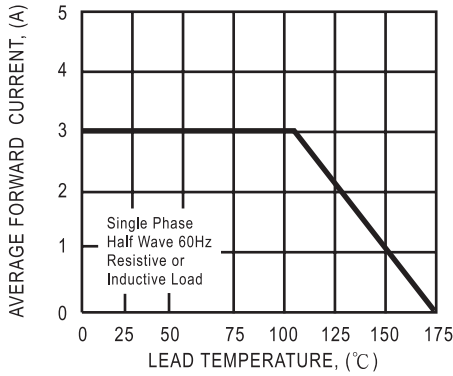


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

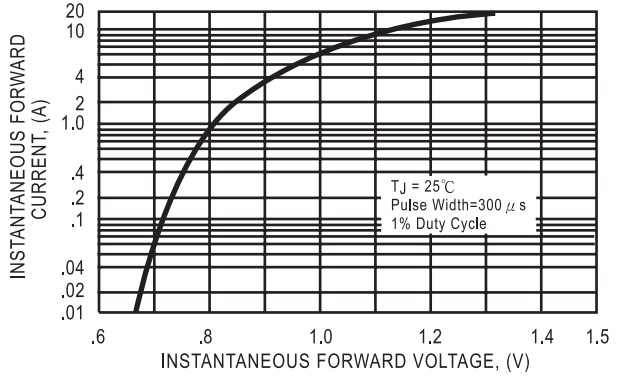


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

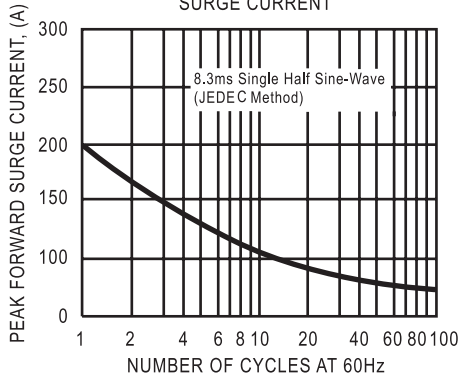


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

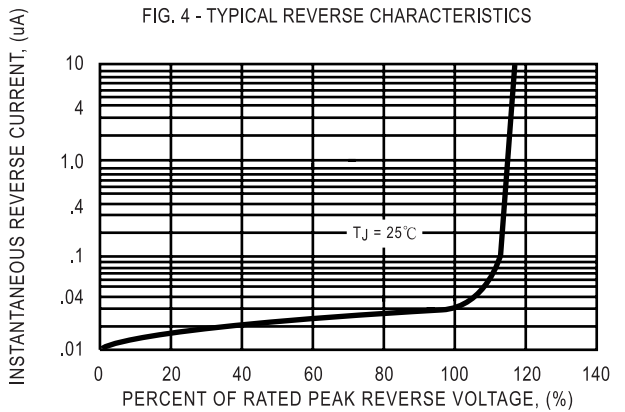
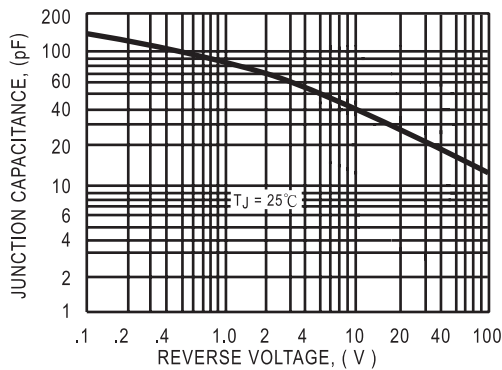


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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