



# 1N5400 thru 1N5408

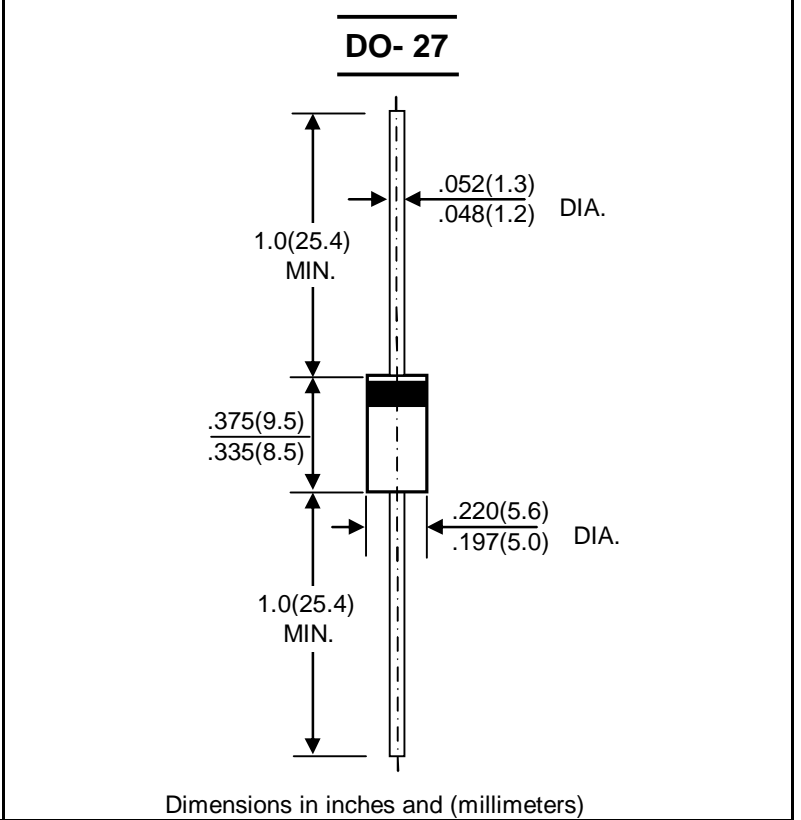
**PLASTIC SILICON RECTIFIERS**      REVERSE VOLTAGE - **50 to 1000** Volts  
 FORWARD CURRENT - **3.0** Amperes

**FEATURES**

- Low cost
- Diffused junction
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL recognition 94V-0

**MECHANICAL DATA**

- Case: JEDEC DO-27 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.04 ounces , 1.1grams
- Mounting position: Any



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

| CHARACTERISTICS  | SYMBOL            | 1N          | 1N   | 1N   | 1N   | 1N   | 1N   | 1N   | 1N   | 1N   | UNIT |
|--|-------------------|-------------|------|------|------|------|------|------|------|------|------|
|  |                   | 5400        | 5401 | 5402 | 5403 | 5404 | 5405 | 5406 | 5407 | 5408 |      |
| Maximum Recurrent Peak Reverse Voltage   | V <sub>RRM</sub>  | 50          | 100  | 200  | 300  | 400  | 500  | 600  | 800  | 1000 | V    |
| Maximum RMS Voltage  | V <sub>RMS</sub>  | 35          | 70   | 140  | 210  | 280  | 350  | 420  | 560  | 700  | V    |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>   | 50          | 100  | 200  | 300  | 400  | 500  | 600  | 800  | 1000 | V    |
| Maximum Average Forward Rectified Current @T <sub>A</sub> =55 °C                                     | I <sub>(AV)</sub> | 3.0         |      |      |      |      |      |      |      |      | A    |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Supe Imposed on Rated Load(JEDEC Method)      | I <sub>FSM</sub>  | 200         |      |      |      |      |      |      |      |      | A    |
| Maximum Forward Voltage at 3.0A DC   | V <sub>F</sub>    | 1.0         |      |      |      |      |      |      |      |      | V    |
| Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C | I <sub>R</sub>    | 5.0         |      |      |      |      |      |      |      |      | μA   |
| Typical Junction Capacitance (Note1)   | C <sub>J</sub>    | 50          |      |      |      |      |      | 35   |      |      | pF   |
| Typical Thermal Resistance (Note2)   | R <sub>θJA</sub>  | 15          |      |      |      |      |      |      |      |      | °C/W |
| Operating Temperature Range  | T <sub>J</sub>    | -55 to +150 |      |      |      |      |      |      |      |      | °C   |
| Storage Temperature Range  | T <sub>STG</sub>  | -55 to +150 |      |      |      |      |      |      |      |      | °C   |

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC  
 2.Thermal resistance junction to ambient.

FIG. 1 – FORWARD CURRENT DERATING CURVE

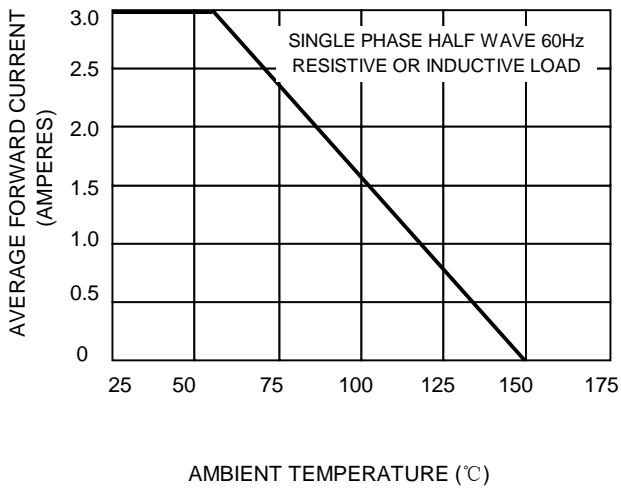


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

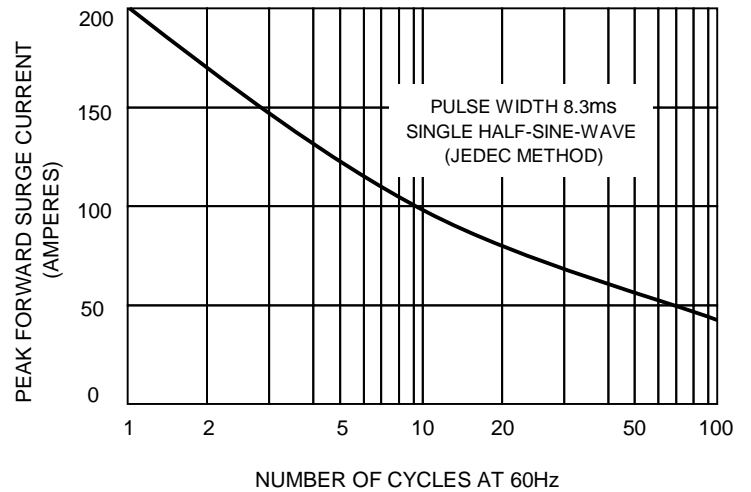


FIG.3 – TYPICAL JUNCTION CAPACITANCE

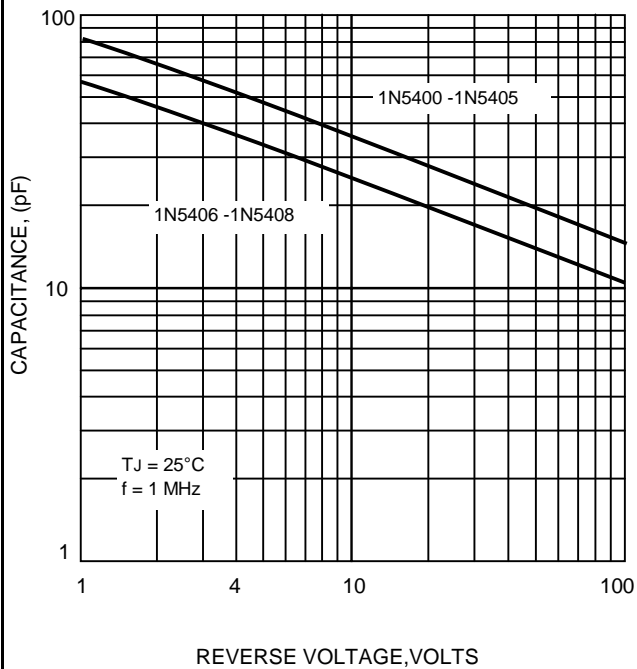


FIG.4-TYPICAL FORWARD CHARACTERISTICS

