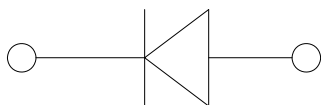
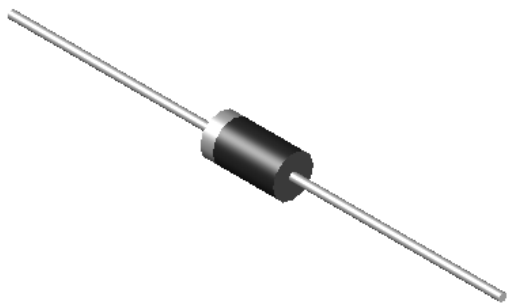


## General Purpose Rectifier



## Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

## Mechanical Data

- **Package:** DO-201AD(DO-27)  
Molding compound meets UL 94 V-0 flammability rating,  
RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

■Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                                                                                   | SYMBOL             | UNIT | 1N5400    | 1N5401 | 1N5402 | 1N5404 | 1N5406 | 1N5407 | 1N5408 |
|---------------------------------------------------------------------------------------------|--------------------|------|-----------|--------|--------|--------|--------|--------|--------|
| Device marking code                                                                         |                    |      | 1N5400    | 1N5401 | 1N5402 | 1N5404 | 1N5406 | 1N5407 | 1N5408 |
| Repetitive Peak Reverse Voltage                                                             | V <sub>RRM</sub>   | V    | 50        | 100    | 200    | 400    | 600    | 800    | 1000   |
| Average Forward Current @60Hz sine wave, Resistance load, T <sub>a</sub> =60°C              | I <sub>F(AV)</sub> | A    | 3.0       |        |        |        |        |        |        |
| Forward Surge Current (Non-repetitive) @ 60Hz Half-sine wave, 1 cycle, T <sub>a</sub> =25°C | I <sub>FSM</sub>   | A    | 150       |        |        |        |        |        |        |
| Storage Temperature                                                                         | T <sub>stg</sub>   | °C   | -55 ~+150 |        |        |        |        |        |        |
| Junction Temperature                                                                        | T <sub>j</sub>     | °C   | -55~+150  |        |        |        |        |        |        |

■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                                                         | SYMBOL            | UNIT | TEST CONDITIONS                                            | 1N5400 | 1N5401 | 1N5402 | 1N5404 | 1N5406 | 1N5407 | 1N5408 |
|-------------------------------------------------------------------|-------------------|------|------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Maximum instantaneous forward voltage drop per diode              | V <sub>FM</sub>   | V    | I <sub>FM</sub> =3.0A                                      | 1.0    |        |        |        |        |        |        |
| Maximum DC reverse current at rated DC blocking voltage per diode | I <sub>RRM1</sub> | μA   | T <sub>a</sub> =25°C                                       | 2.5    |        |        |        |        |        |        |
|                                                                   | I <sub>RRM2</sub> |      | T <sub>a</sub> =125°C                                      | 50     |        |        |        |        |        |        |
| Typical junction capacitance                                      | C <sub>j</sub>    | pF   | Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C. | 50     |        |        |        |        |        |        |

■Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

| PARAMETER                   | SYMBOL           | UNIT | 1N5400 | 1N5401 | 1N5402 | 1N5404 | 1N5406 | 1N5407 | 1N5408 |
|-----------------------------|------------------|------|--------|--------|--------|--------|--------|--------|--------|
| Thermal Resistance(Typical) | R <sub>θJA</sub> | °C/W | 30     |        |        |        |        |        |        |

# 1N5400 THRU 1N5408

## ■ Ordering Information (Example)

| PREFERRED P/N | PACKAGE CODE | UNIT WEIGHT(g)   | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|------------------|----------------------|-------------------------|----------------------------|---------------|
| 1N5400~1N5408 | D1           | Approximate 1.05 | 1250                 | 1250                    | 12500                      | Tape          |
| 1N5400~1N5408 | C1           | Approximate 1.05 | 250                  | 250                     | 12500                      | Bulk          |

## ■ Characteristics (Typical)

FIG.1:  $I_o$ - $T_a$  Curve

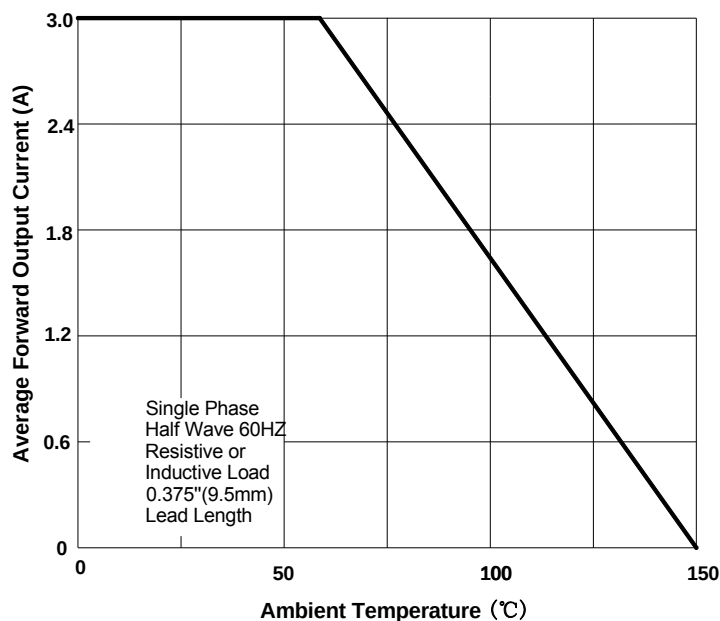


FIG.2: Forward Surge Current Capability

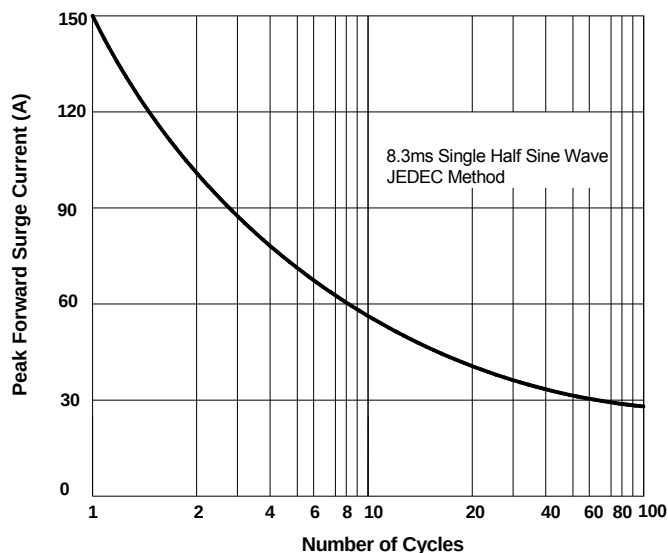


FIG.3: Forward Voltage

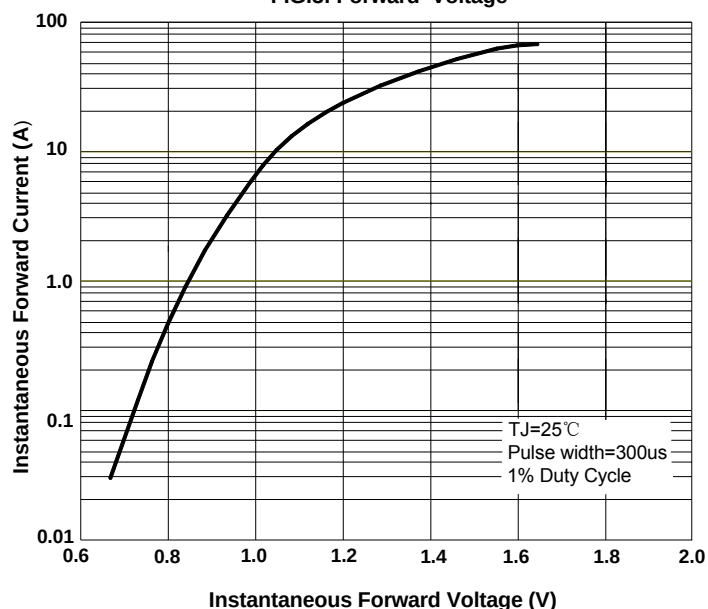
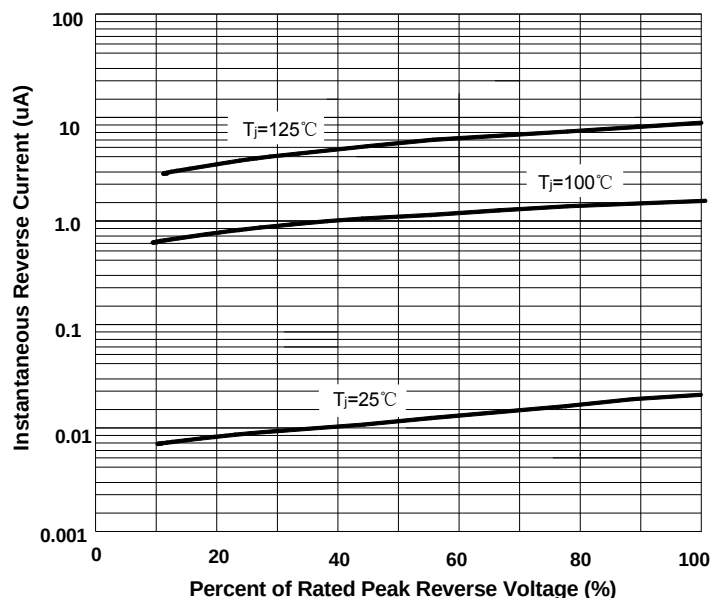
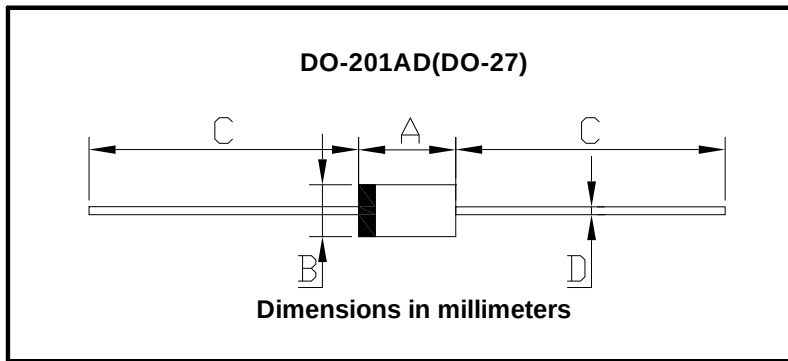


FIG.4: Typical Reverse Characteristics



# 1N5400 THRU 1N5408

## ■ Outline Dimensions



| DO-201AD(DO-27) |      |      |
|-----------------|------|------|
| Dim             | Min  | Max  |
| A               | 8.50 | 9.50 |
| B               | 5.00 | 5.60 |
| C               | 25.4 | /    |
| D               | 1.20 | 1.30 |