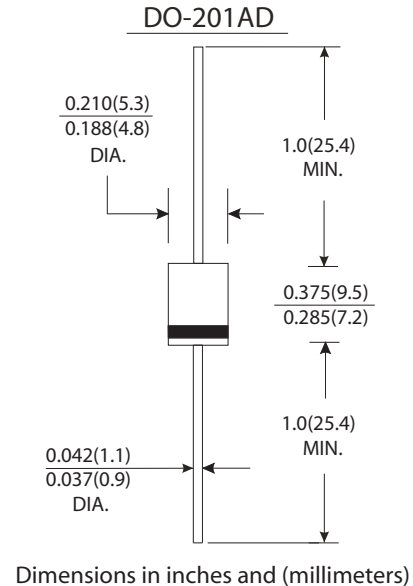


### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability
- High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching
- Low leakage

### Mechanical Data

- Case : JEDEC DO-201AD molded plastic body
- Epoxy : UL94V-0 rate flame retardant
- Lead : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.042 ounce, 1.19 gram



### Maximum Ratings And Electrical Characteristics

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

|   | Symbols                            | UF 5400     | UF 5401 | UF 5402 | UF 5403 | UF 5404 | UF 5406 | UF 5407 | UF 5408 | Units |
|---|------------------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|-------|
| Maximum recurrent peak reverse voltage  | V <sub>RRM</sub>                   | 50          | 100     | 200     | 300     | 400     | 600     | 800     | 1000    | Volts |
| Maximum RMS voltage   | V <sub>RMS</sub>                   | 35          | 70      | 140     | 210     | 280     | 420     | 560     | 700     | Volts |
| Maximum DC blocking voltage   | V <sub>DC</sub>                    | 50          | 100     | 200     | 300     | 400     | 600     | 800     | 1000    | Volts |
| Maximum average forward rectified current 0.375"(9.5mm) lead length at T <sub>A</sub> =50°C             | I <sub(av)< sub=""></sub(av)<>     | 3.0         |         |         |         |         |         |         |         | Amps  |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)        | I <sub>FSM</sub>                   | 200.0       |         |         |         |         | 150.0   |         |         | Amps  |
| Maximum instantaneous forward voltage at 3.0A   | V <sub>F</sub>                     | 1.0         |         |         | 1.3     |         | 1.7     |         |         | Volts |
| Maximum DC reverse current at rated DC blocking voltage   | I <sub>R</sub>                     | 10.0        |         |         |         |         |         |         |         | μ A   |
| Maximum full load reverse current full cycle average. 0.375"(9.5mm) lead length at T <sub>L</sub> =55°C |                                    | 150         |         |         |         |         |         |         |         |       |
| Maximum reverse recovery time (Note 1)  | T <sub>rr</sub>                    | 50          |         |         |         |         | 70      |         |         | ns    |
| Typical junction capacitance (Note 2)   | C <sub>J</sub>                     | 70          |         |         |         |         | 50      |         |         | pF    |
| Operating junction and storage temperature range  | T <sub>J</sub><br>T <sub>STG</sub> | -65 to +150 |         |         |         |         |         |         |         | °C    |

#### Notes:

- (1) Test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>rr</sub>=0.25A.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.



## RATINGS AND CHARACTERISTIC CURVES UF5400 THRU UF5408

FIG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

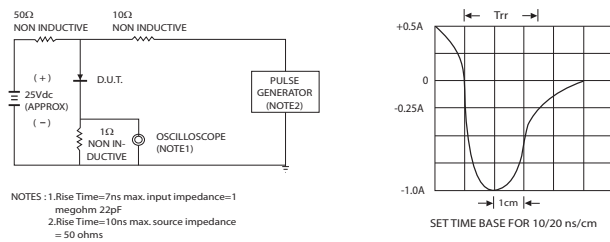


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

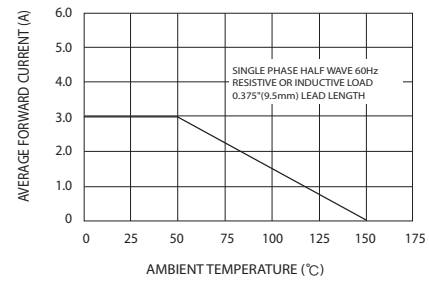


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

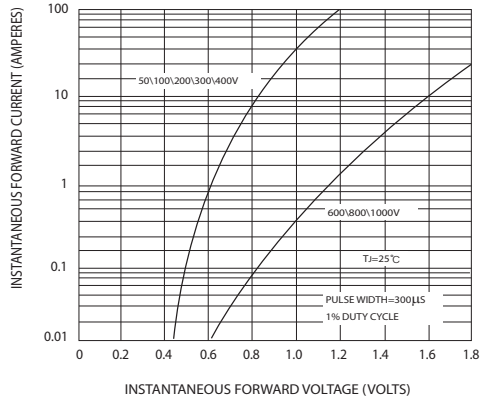


FIG.4-TYPICAL REVERSE CHARACTERISTICS

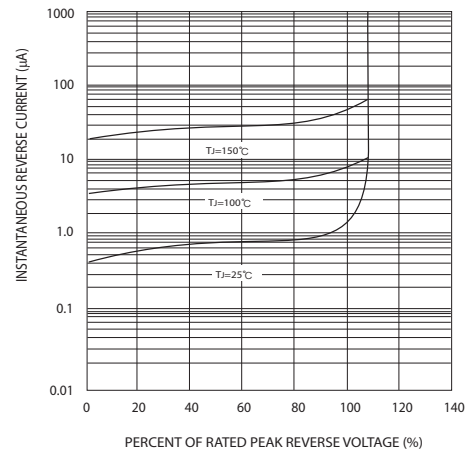


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

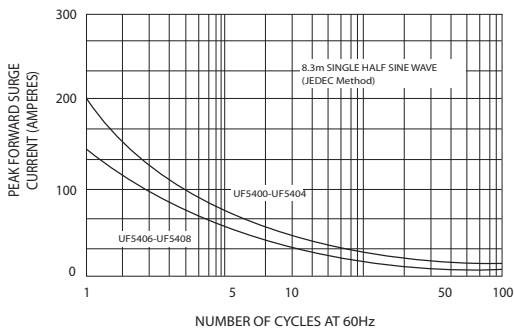


FIG.6-TYPICAL JUNCTION CAPACITANCE

