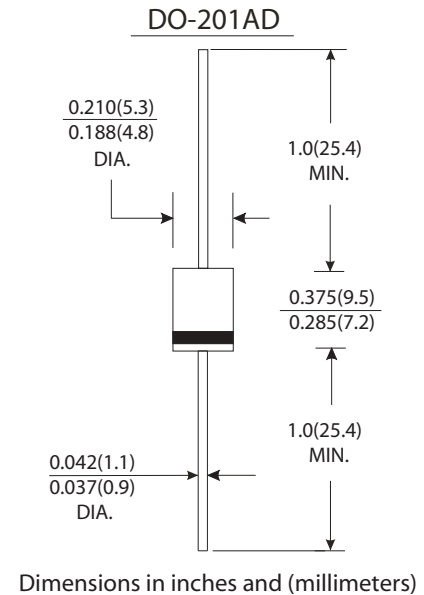


### Features

- Plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Fast switching high efficiency
- Glass passivated junction
- High current capability
- High temperature soldering guaranteed : 250°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs.(2.3kg) tension.

### Mechanical Data

- Case : JEDEC DO-201AD molded plastic body
- Terminals : Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.041 ounce, 1.18 grams



### 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                            | BY396G      | BY397G | BY398G | BY399G | Units |
|--|------------------------------------|-------------|--------|--------|--------|-------|
| Maximum recurrent peak reverse voltage   | V <sub>RRM</sub>                   | 100         | 200    | 400    | 800    | Volts |
| Maximum RMS voltage  | V <sub>RMS</sub>                   | 70          | 140    | 280    | 560    | Volts |
| Maximum DC blocking voltage  | V <sub>DC</sub>                    | 100         | 200    | 400    | 800    | Volts |
| Maximum average forward rectified current R load at T <sub>A</sub> =50°C                                 | I <sub(av)< sub=""></sub(av)<>     | 3.0         |        |        |        | Amps  |
| Peak forward surge current 10ms single half sine-wave superimposed on rated load at T <sub>A</sub> =25°C | I <sub>FSM</sub>                   | 100.0       |        |        |        | Amps  |
| Maximum instantaneous forward voltage at 3.0A  | V <sub>F</sub>                     | 1.3         |        |        |        | Volts |
| Maximum DC reverse current at rated DC blocking voltage  | T <sub>A</sub> =25°C               | 5.0         |        |        |        | µA    |
|  | T <sub>A</sub> =125°C              | 125         |        |        |        |       |
| Maximum reverse recovery time (Note 1)   | T <sub>rr</sub>                    | 250         |        |        |        | ns    |
| Max.thermal resistance   | R <sub>θJA</sub>                   | 30          |        |        |        | °C/W  |
| Typical junction capacitance (Note 2)  | C <sub>J</sub>                     | 25.0        |        |        |        | pF    |
| Operating junction and storage temperature range   | T <sub>J</sub><br>T <sub>STG</sub> | -65 to +175 |        |        |        | °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 BY396G THRU BA399G

FIG.1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

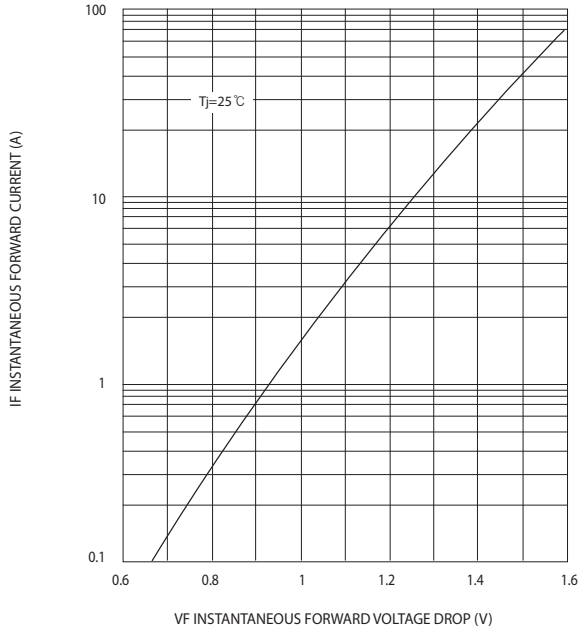


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

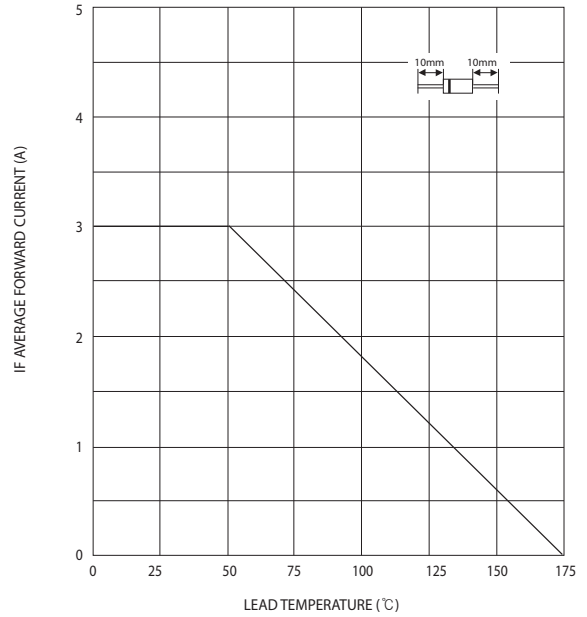


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

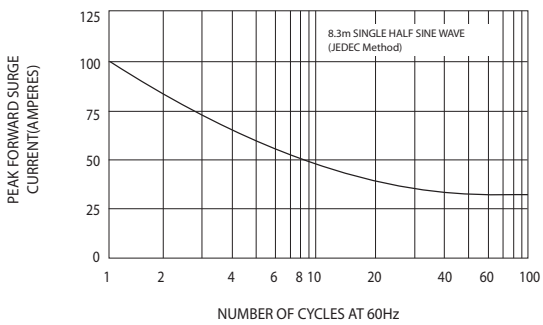


FIG.4-TYPICAL JUNCTION CAPACITANCE

