

## BY396G THRU BY399G

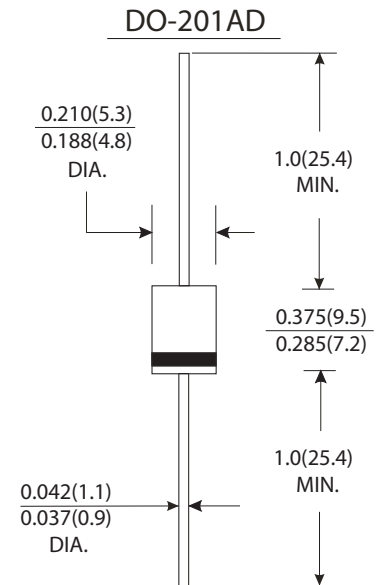
CURRENT 3.0 Amperes  
VOLTAGE 100 to 800 Volts

### 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



Dimensions in inches and (millimeters)

### 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 TA=50 °C	I(AV)	3.0				Amps
Peak forward surge current 10ms single half sine-wave superimposed on rated load at TA=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	TA=25 °C	5.0				μA
	TA=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> 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

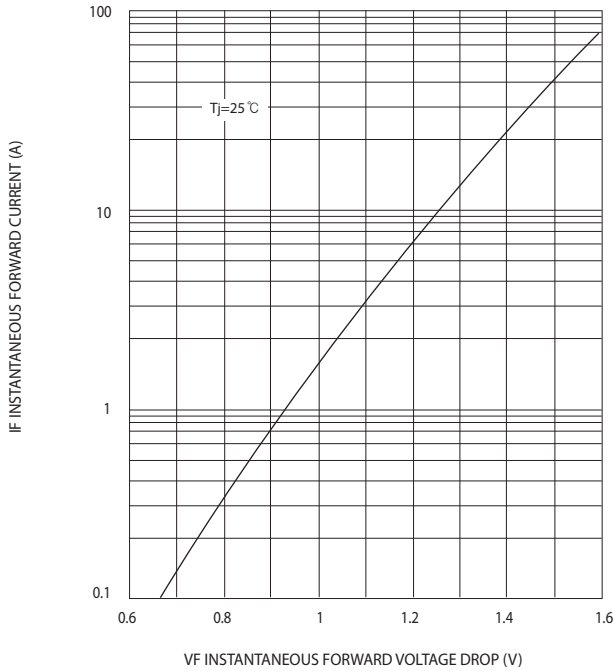


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

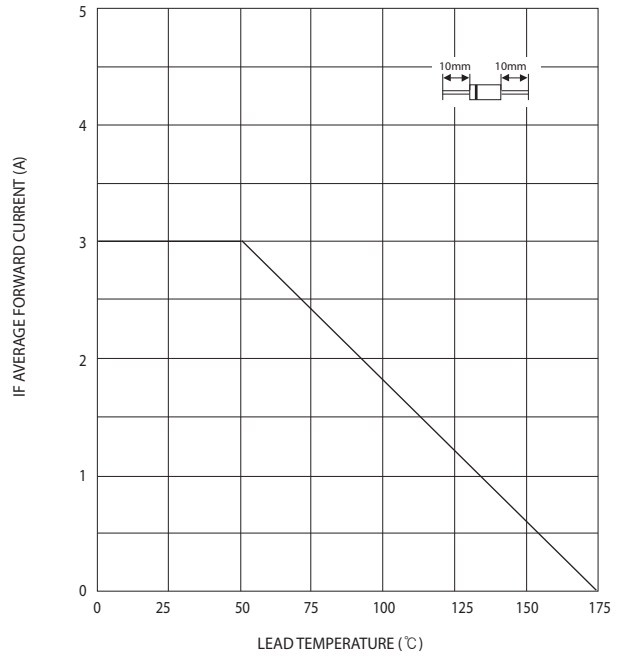


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

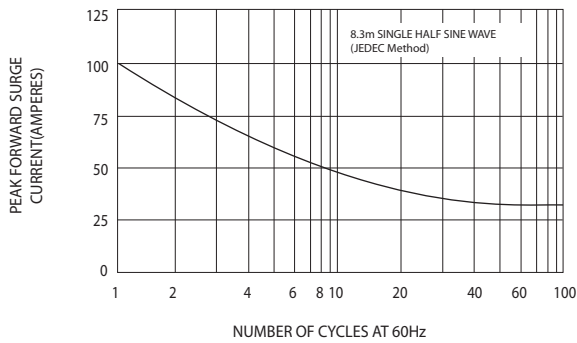


FIG.4-TYPICAL JUNCTION CAPACITANCE

