

DEC

BY396 THRU BY399S

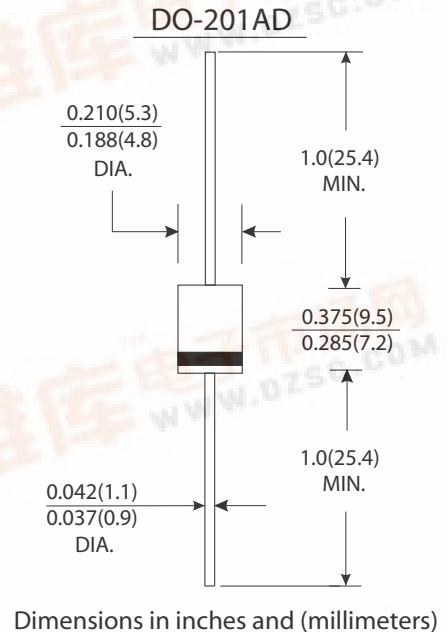
CURRENT 3.0 Amperes
VOLTAGE 100 to 1000 Volts

Features

- Plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Fast switching high efficiency
- Diffused 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	BY396	BY397	BY398	BY399	BY399S	Units
Maximum recurrent peak reverse voltage	V _{RRM}	100	200	400	800	1000	Volts
Maximum RMS voltage	V _{RMS}	70	140	280	560	700	Volts
Maximum DC blocking voltage	V _{DC}	100	200	400	800	1000	Volts
Maximum average forward rectified current R load at T _A =50 °C	I _(AV)	3.0					Amps
Peak forward surge current 10ms single half sine-wave superimposed on rated load at load at T _A =25 °C	I _{FSM}	100.0					Amps
Maximum instantaneous forward voltage at 3.0A	V _F	1.3					Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	10.0					μA
Maximum reverse recovery time (Note 1)	T _{rr}	250					ns
Max.thermal resistance	R _{θJA}	30					°C/W
Typical junction capacitance (Note 2)	C _J	25.0					pF
Operating junction and storage temperature range	T _J T _{STG}	-65 to +150					°C

(1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.

(2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.



RATINGS AND CHARACTERISTIC CURVES BY396 THRU BY399S

FIG.1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

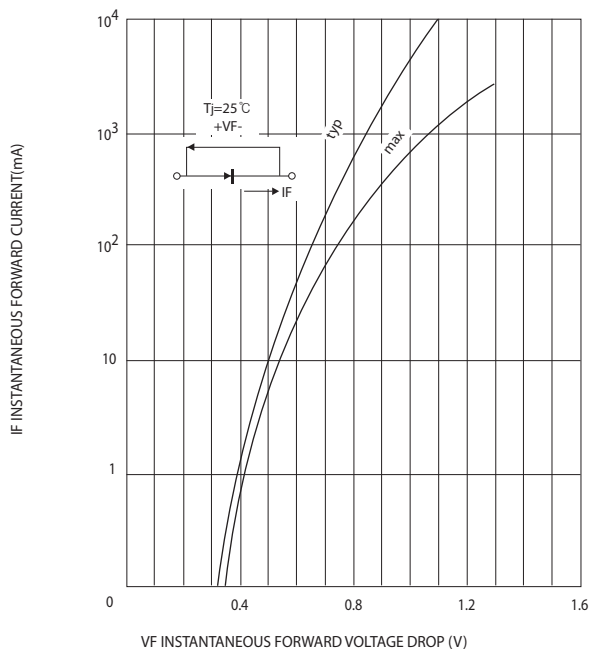


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

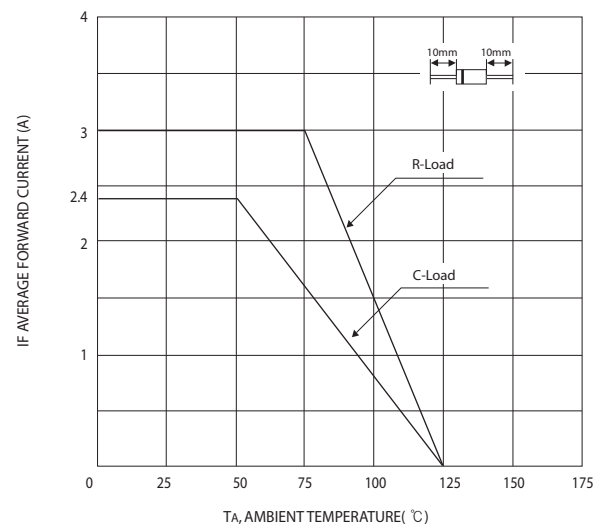


FIG.3-TYPICAL THERMAL IMPEDANCE

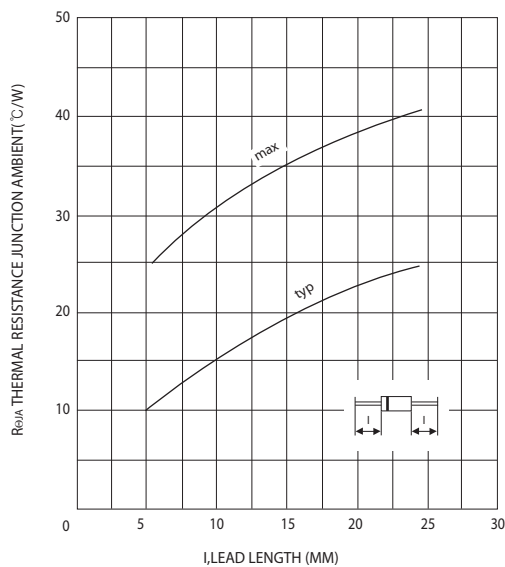


FIG.4-TYPICAL JUNCTION CAPACITANCE

