DEC

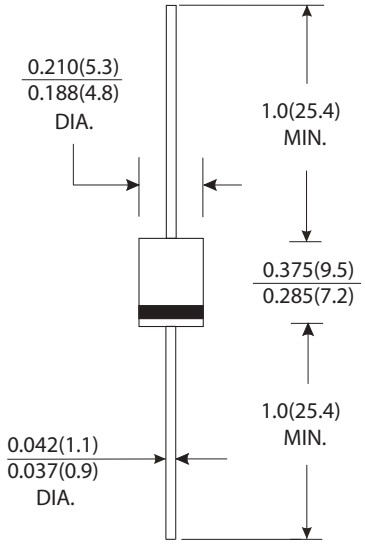
BY396 THRU BY399S

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℃/10 seconds, 0.375"(9.5mm) lead length, 5 lbs.(2.3kg) tension.

DO-201AD



Dimensions in inches and (millimeters)

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℃ 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℃	$I_{(AV)}$	3.0					Amps
Peak forward surge current 10ms single half sine-wave superimposed on rated load at load at T_A=25℃	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)	Trr	250					ns
Max.thermal resistance	$R_{\Theta JA}$	30					℃/W
Typical junction capacitance (Note 2)	C_J	25.0					pF
Operating junction and storage temperature range	T_J T_{STG}	-65 to +150					℃

Notes:
(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

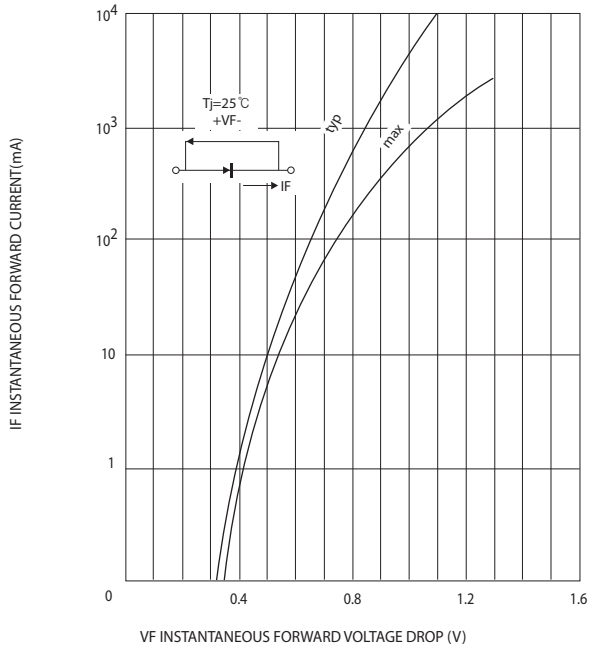


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

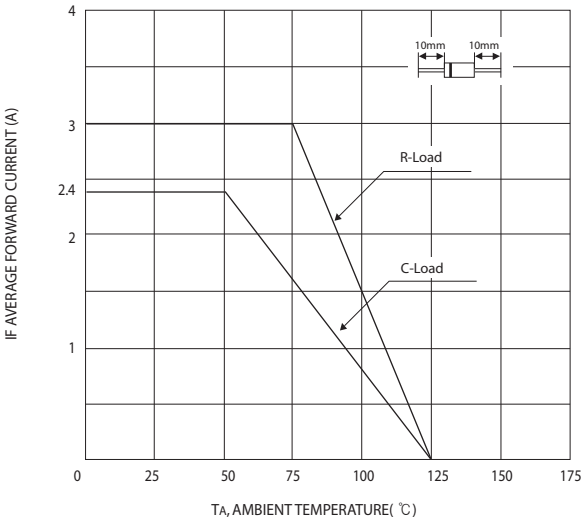


FIG.3-TYPICAL THERMAL IMPEDANCE

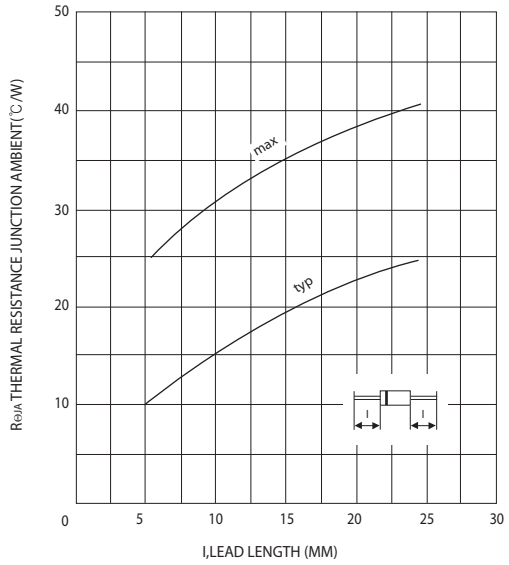


FIG.4-TYPICAL JUNCTION CAPACITANCE

