

VOLTAGE RANGE: 100 - 800V

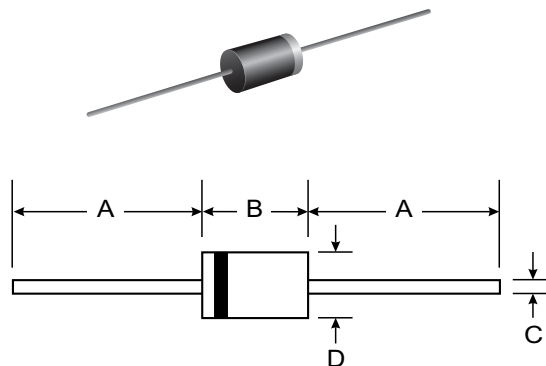
CURRENT: 3.0 A

Features

- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents

Mechanical Data

- Case : DO-201AD Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight: 1.2 grams (approx.)



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

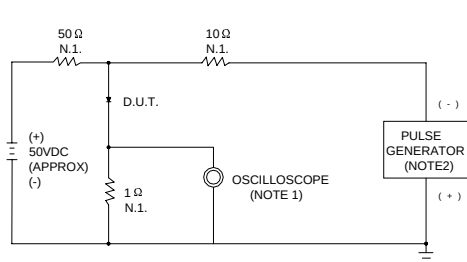
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	BY396	BY397	BY398	BY399	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	100	200	400	800	V
Maximum RMS Voltage	V _{RMS}	70	140	280	560	V
Maximum DC Blocking Voltage	V _{DC}	100	200	400	800	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length T _a = 50 °C	I _{F(AV)}	3.0				A
Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	100				A
Maximum Peak Forward Voltage at I _F = 2.0 Amps.	V _F	1.25				V
Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a = 100 °C	I _R	10				μA
	I _{R(H)}	200				μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	150				ns
Typical Junction Capacitance (Note 2)	C _J	32				pf
Junction Temperature Range	T _J	- 50 to + 125				°C
Storage Temperature Range	T _{STG}	- 50 to + 150				°C

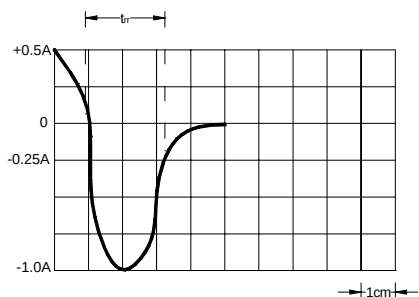
Notes :

- (1) Reverse Recovery Test Conditions : I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A.
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 V_{DC}

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



NOTES: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1MΩ, 22pF
2. RISE TIME=10ns MAX. SOURCE IMPEDANCE=50Ω



SET TIME BASE FOR 50/100 ns /cm

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

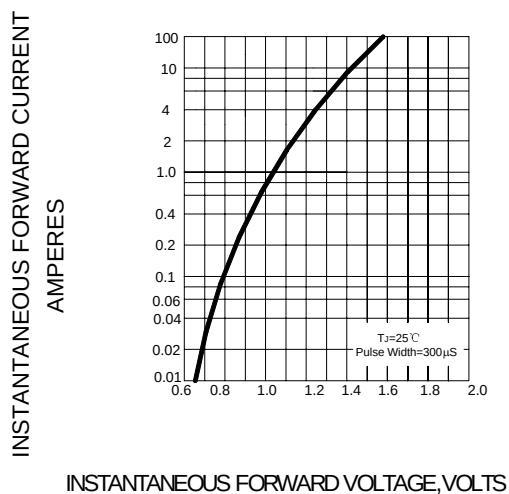


FIG.3 – FORWARD DERATING CURVE

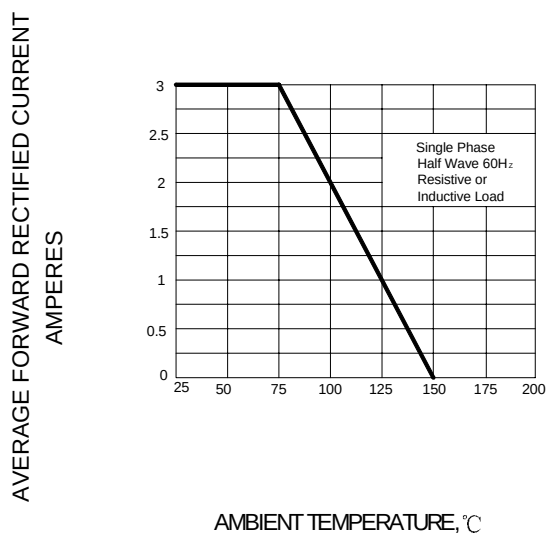


FIG.4 – TYPICAL JUNCTION CAPACITANCE

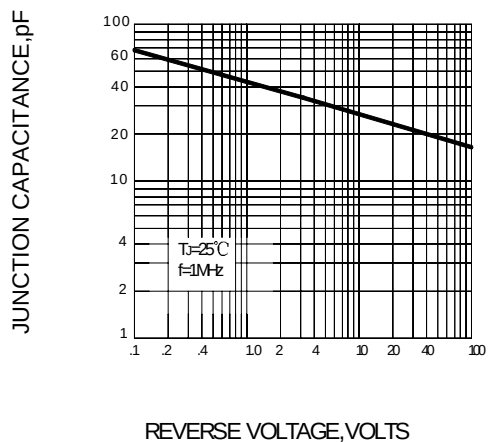


FIG.5 – PEAK FORWARD SURGE CURRENT

