

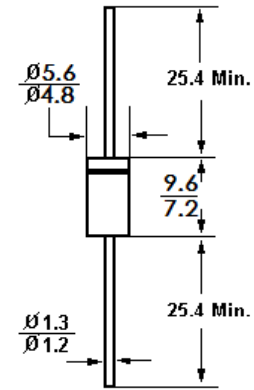
Features

- Low forward voltage
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- **Cases:** Molded plastic
- **Epoxy:** UL 94V-0 rate flame retardant
- **Lead:** Axial leads, solderable per MIL-STS-202, Method 208 guaranteed.
- **Polarity:** Color band denotes cathode end.

DO-201AD



Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

		Symbol	Value	Unit	
Recurrent Peak Reverse Voltage	BY396	V_{RRM}	100	V	
	BY397	V_{RRM}	200	V	
	BY398	V_{RRM}	400	V	
	BY399	V_{RRM}	800	V	
RMS Voltage	BY396	V_{RMS}	70	V	
	BY397	V_{RMS}	140	V	
	BY398	V_{RMS}	280	V	
	BY399	V_{RMS}	560	V	
DC Blocking Voltage	BY396	V_{DC}	100	V	
	BY397	V_{DC}	200	V	
	BY398	V_{DC}	400	V	
	BY399	V_{DC}	800	V	
Average Forward Rectified Current at T _A =55°C		I _{FAV}	3	A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I _{FSM}	150	A	
Instantaneous Forward Voltage @ 3 A		V _F	1.3	V	
DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =100°C		I _R	10	uA	
			150	uA	
Reverse Recovery Time (Note 1)		t _{rr}	250	ns	
Typical Junction Capacitance (Note 2)		C _j	60	pF	
Operating Temperature Range		T _J	-65 to +150	°C	
Storage Temperature Range		T _{Stg}	-65 to +150	°C	

1) Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.

2) Measured at 1MHz and Applied Reverse Voltage of 4.0V DC.

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

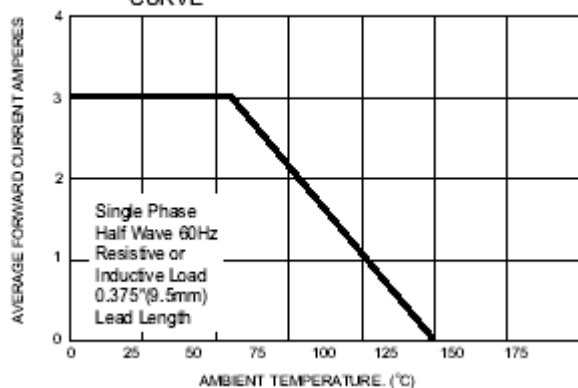


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

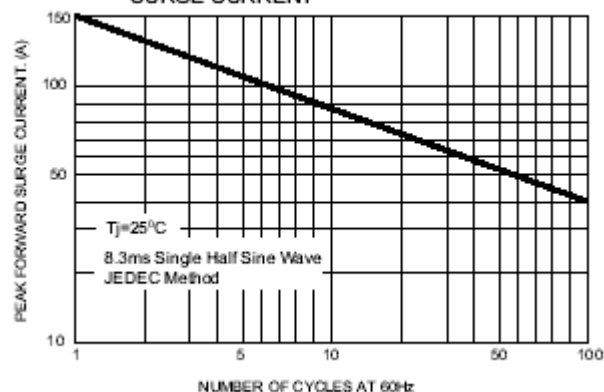


FIG.3- TYPICAL FORWARD CHARACTERISTICS

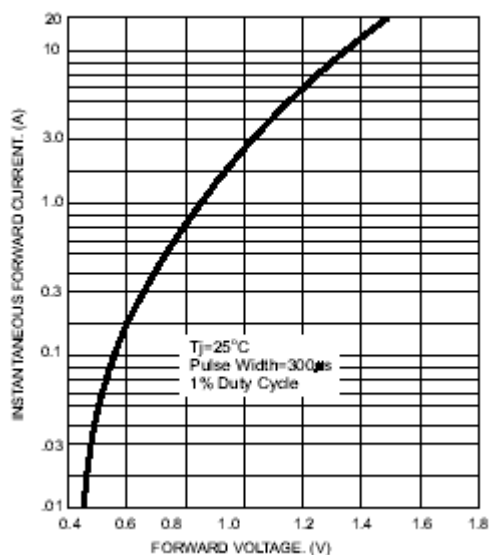


FIG.4- TYPICAL JUNCTION CAPACITANCE

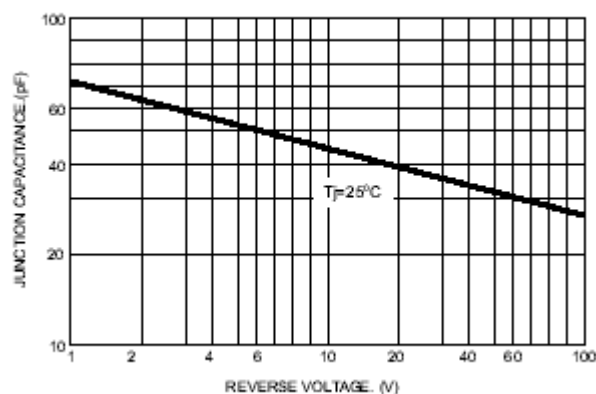


FIG.5- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

