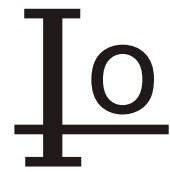


# BY396 THRU BY399



## 3.0 AMP FAST RECOVERY RECTIFIERS



### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability

### MECHANICAL DATA

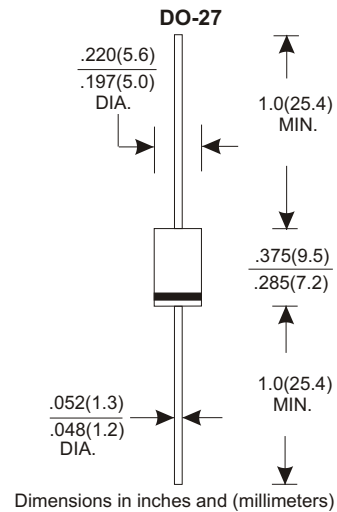
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.10 grams

### VOLTAGE RANGE

50 to 1000 Volts

### CURRENT

3.0 Ampere



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	By396	BY397	BY398	By399	UNITS
Maximum Recurrent Peak Reverse Voltage	100	200	400	800	V
Maximum RMS Voltage	70	140	280	560	V
Maximum DC Blocking Voltage	100	200	400	800	V
Maximum Average Forward Rectified Current					
.375"(9.5mm) Lead Length at Ta=75°C	3.0				A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	200				A
Maximum Instantaneous Forward Voltage at 3.0A	1.25				V
Maximum DC Reverse Current Ta=25°C	5.0				A
at Rated DC Blocking Voltage Ta=100°C	150				A
Maximum Reverse Recovery Time (Note 1)	150		250		nS
Typical Junction Capacitance (Note 2)	60				pF
Operating and Storage Temperature Range Tj, TSTG	-65— +150				°C

#### NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.