

## FAST RECOVERY RECTIFIERS

REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 3.0 Amperes

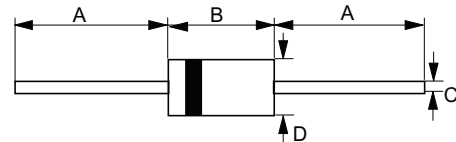
### FEATURES

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

### MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.04 ounces, 1.2 grams
- Mounting position : Any

### DO-201AD



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	8.50	9.50
C	1.20 $\varnothing$	1.30 $\varnothing$
D	5.0 $\varnothing$	5.60 $\varnothing$
Dimensions in millimeters		

### 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 current by 20%

CHARACTERISTICS	SYMBOL	PR3001	PR3002	PR3003	PR3004	PR3005	PR3006	PR3007	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =55°C	I <sub>(AV)</sub>	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150							A
Maximum forward Voltage at 3.0A DC	V <sub>F</sub>	1.3							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0 100							uA uA
Maximum Reverse Recovery Time (Note 1)	T <sub>RR</sub>	150				250	500		ns
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	65				40			pF
Typical Thermal Resistance (Note 3)	R <sub>θJA</sub>	15							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

NOTES : 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A.  
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
3. Thermal Resistance Junction to Ambient.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

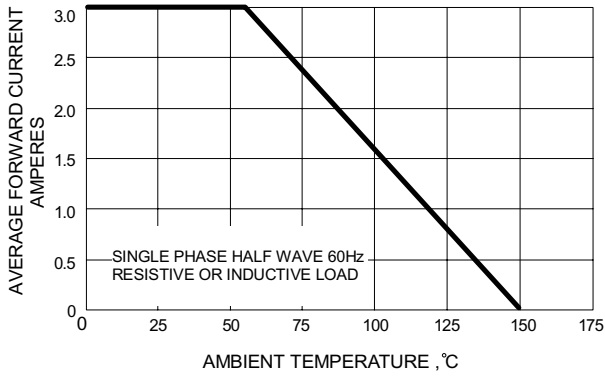


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

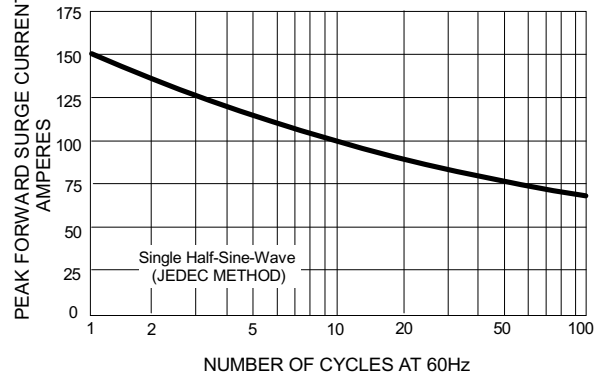


FIG.3 - TYPICAL JUNCTION CAPACITANCE

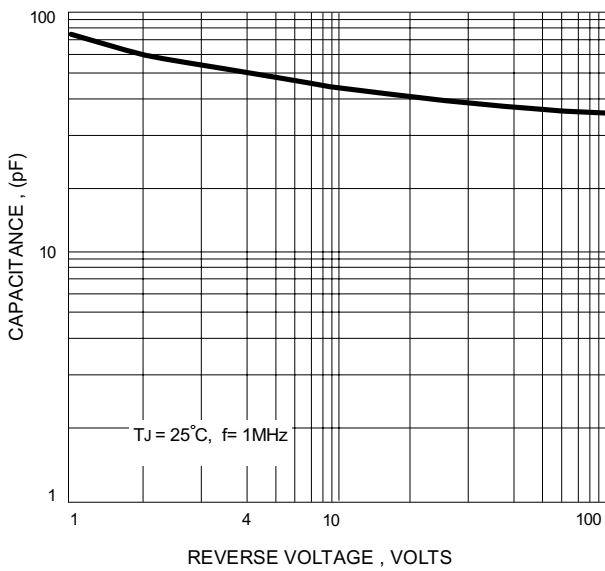


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

