

## MBR320 ~ MBR340

**PRV : 20 - 40 Volts**  
**I<sub>o</sub> : 3.0 Amperes**

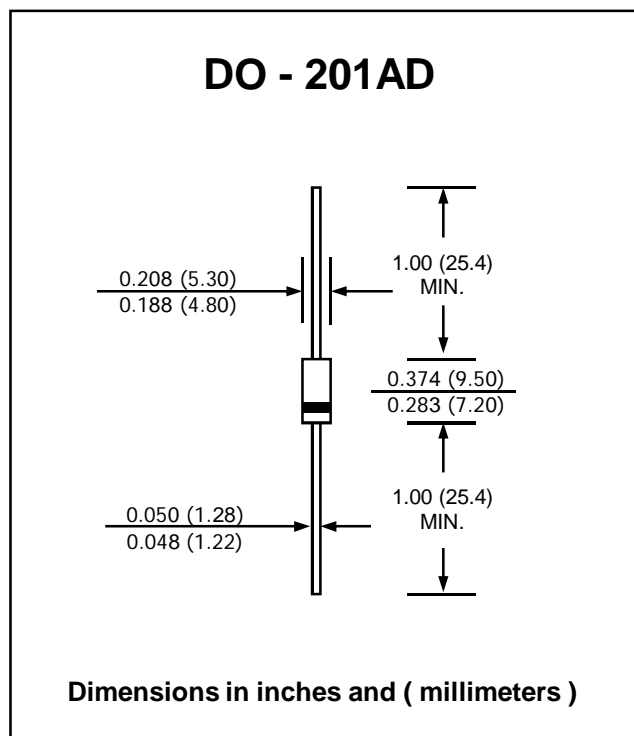
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* High efficiency
- \* Low power loss
- \* Low forward voltage drop
- \* Pb / RoHS Free

### 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 : 1.1 grams

## SCHOTTKY BARRIER RECTIFIER DIODES



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATING	SYMBOL	MBR320	MBR330	MBR340	UNIT
Maximum Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	20	30	40	V
Maximum Working Peak Reverse Voltage	V <sub>RMS</sub>	20	30	40	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	V
Maximum Average Forward Current , Ta = 65 °C	I <sub>F(AV)</sub>	3.0			A
Maximum Non-repetitive Peak Surge Current, (Surge applied at rated load conditions, Half wave, single phase 60 Hz, T <sub>L</sub> = 75°C)	I <sub>FSM</sub>	80			A
Maximum Instantaneous Forward Voltage at I <sub>F</sub> = 3.0 A (1)	V <sub>F</sub>	0.6			V
Maximum Reverse Current at Rated DC Blocking Voltage (1)	I <sub>R</sub>	0.6 (T <sub>L</sub> = 25 °C)			mA
	I <sub>R(H)</sub>	20 (T <sub>L</sub> = 25 °C)			mA
Junction Temperature Range	T <sub>J</sub>	150			°C
Operating and Storage Junction Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 65 to + 150			°C

### Note :

(1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 2%

## RATING AND CHARACTERISTIC CURVES ( MBR320 - MBR340 )

FIG.1 - FORWARD CURRENT DERATING CURVE

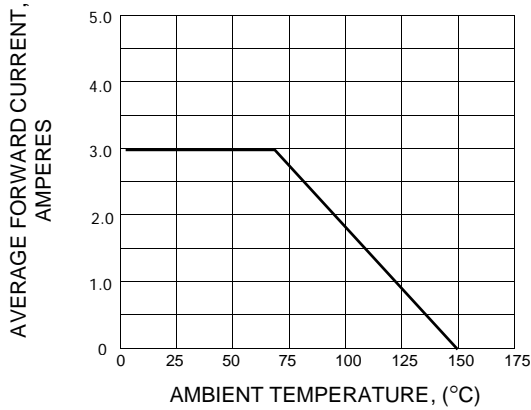


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

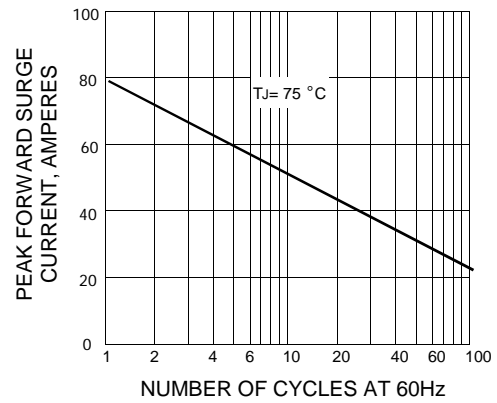


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

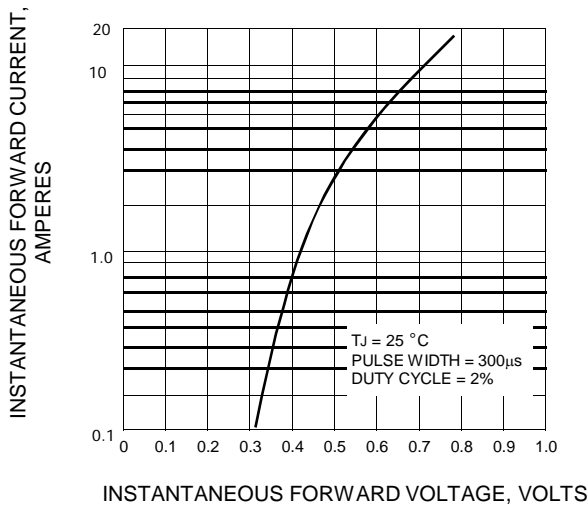


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

