

MBR320 ~ MBR340

SCHOTTKY BARRIER RECTIFIER DIODES

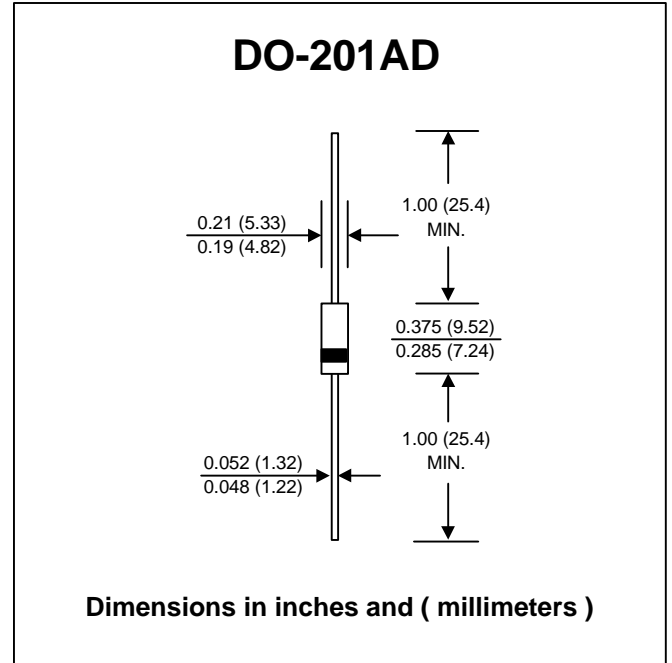
PRV : 20 - 40 Volts
I_o : 3.0 Amperes

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



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 _{RRM}	20	30	40	V
Maximum Working Peak Reverse Voltage	V _{RMS}	20	30	40	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	V
Maximum Average Forward Current , see Fig.1	I _{F(AV)}	3.0			A
Maximum Non-repetitive Peak Surge Current, (Surge applied at rated load conditions, Half wave, single phase 60 Hz, T _L = 75°C)	I _{FSM}	80			A
Maximum Instantaneous Forward Voltage at I _F = 3.0 A (1)	V _F	0.6			V
Maximum Reverse Current at Rated DC Blocking Voltage (1)	I _R	0.6 (T _L = 25 °C)			mA
	I _{R(H)}	20 (T _L = 25 °C)			mA
Junction Temperature Range	T _J	150			°C
Operating and Storage Junction Temperature Range	T _J , T _{STG}	- 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

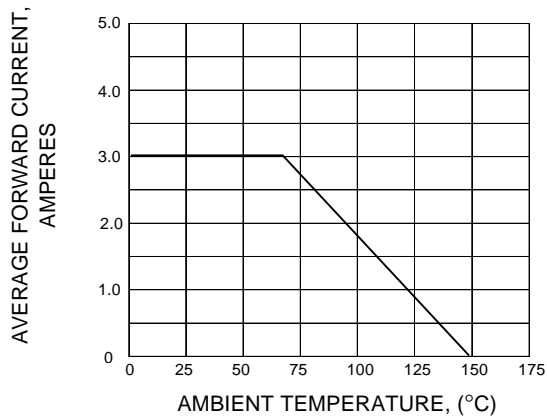


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

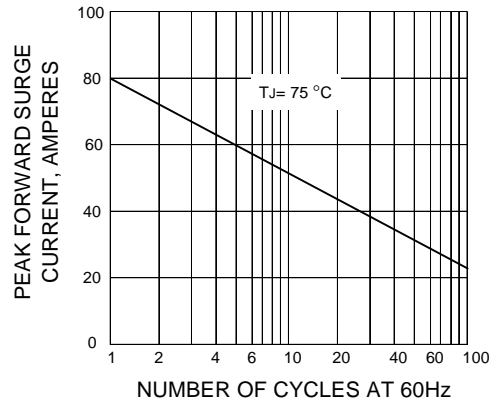


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

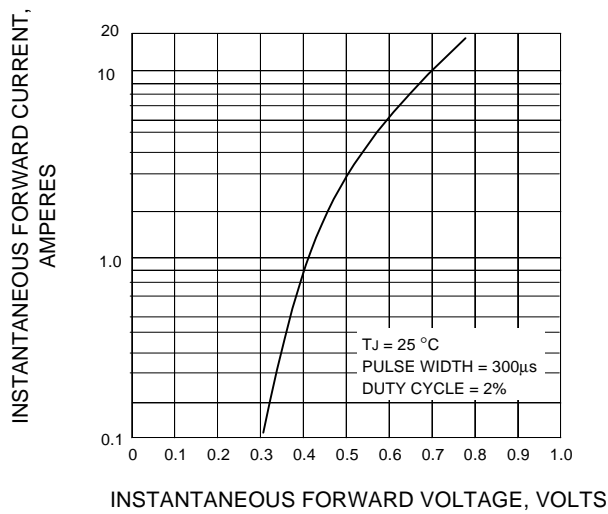


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

