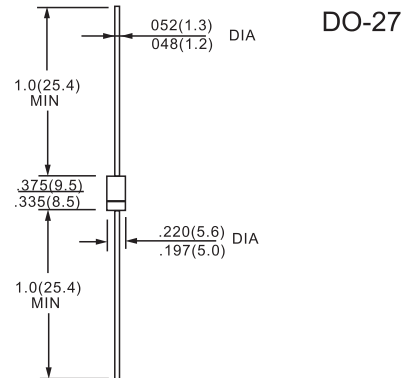


FEATURES

- * 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



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating	Symbol	MBR320	MBR330	MBR340	MBR350	MBR360	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	V
Average Rectified Forward Current, $T_A = 65^\circ\text{C}$ ($R_{\theta JA} = 28^\circ\text{C/W}$, P.C. Board Mounting, see Note 3)	I_O	3.0					A
Non-Repetitive Peak Surge Current (2) (Surge applied at rated load conditions, half wave, single phase 60 Hz, $T_L = 75^\circ\text{C}$)	I_{FSM}	80					A
Operating and Storage Junction Temperature Range (Reverse Voltage applied)	T_J, T_{stg}	- 65 to 150°C					$^\circ\text{C}$
Peak Operating Junction Temperature (Forward Current applied)	$T_{J(pk)}$	150					$^\circ\text{C}$

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient (see Note 3, Mounting Method 3)	$R_{\theta JA}$	28	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_L = 25^\circ\text{C}$ unless otherwise noted) (2)

Characteristic	Symbol	MBR320	MBR330	MBR340	MBR350	MBR360	Unit
Maximum Instantaneous Forward Voltage (1) (I_F = 1.0 Amp) (I_F = 3.0 Amp) (I_F = 9.4 Amp)	V_F	0.500 0.600 0.850			0.600 0.740 1.080		V
Maximum Instantaneous Reverse Current @ Rated dc Voltage (1) T_L = 25°C T_L = 100°C	i_R	0.60 20					mA

(1) Pulse Test: Pulse Width = 300 μs , Duty Cycle = 2.0%.

(2) Lead Temperature reference is cathode lead 1/32" from case.



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MBR320 THRU MBR360

20V-60V 3.0A

RATINGS AND CHARACTERISTIC CURVES MBR320 THRU MBR360

FIG.1 - FORWARD CURRENT DERATING CURVE

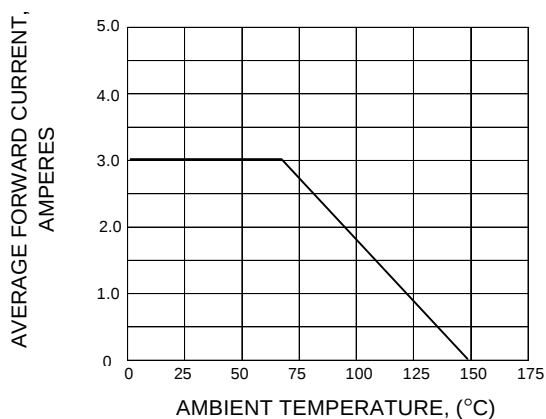


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

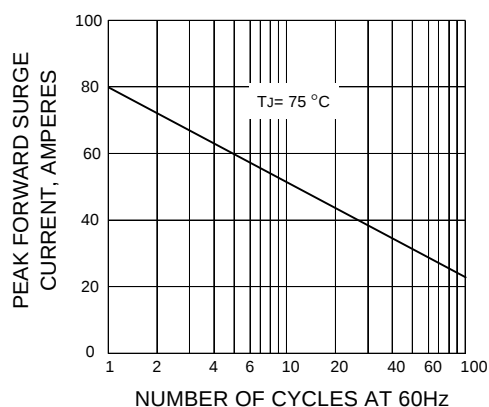


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

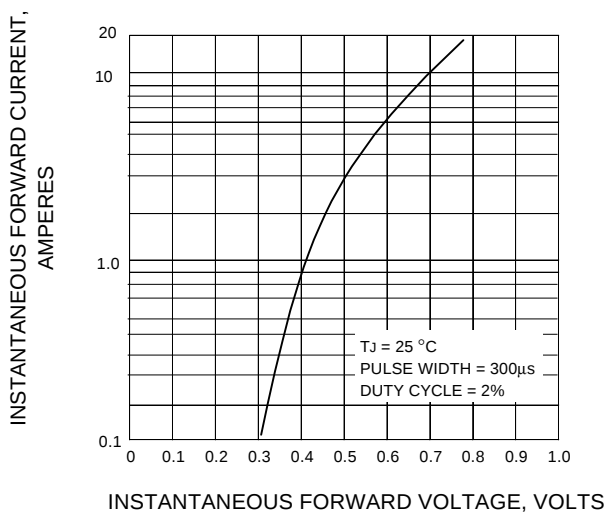


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

