

MBR320-MBR360

3 AMP SCHOTTKY RECTIFIERS

FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

MAXIMUM RATINGS

Rating	Symbol	MBR					Unit
		320	330	340	350	360	
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 @ $T_A = 65^\circ\text{C}$ ($R_{\theta JA} = 28^\circ\text{C/W}$, PC board mounted)	I_O	3.0					A
Non-repetitive peak surge current @ $T_L = 75^\circ\text{C}^{(2)}$ (surge applied at rated load conditions, halfwave, single phase, 60Hz)	I_{FSM}	80					A
Operating and storage junction temperature range	T_J, T_{stg}	-65 to +150					$^\circ\text{C}$
Peak operating junction temperature (forward current applied)	$T_{J(pk)}$	150					$^\circ\text{C}$
Maximum thermal resistance Junction to ambient	$R_{\theta JA}$	28					$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

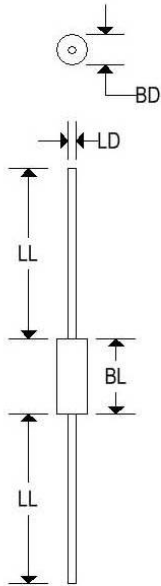
Parameter	Symbol	MBR					Unit
		320	330	340	350	360	
Maximum instantaneous forward voltage ⁽¹⁾ ($I_F = 1.0\text{A}$) ($I_F = 3.0\text{A}$) ($I_F = 9.4\text{A}$)	V_F	0.500		0.600			V
		0.600		0.740			
		0.850		1.080			
Maximum instantaneous reverse current ⁽¹⁾ (Rated dc voltage, $T_C = 25^\circ\text{C}$) (Rated dc voltage, $T_C = 100^\circ\text{C}$)	I_R	0.60					mA
		20					

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MECHANICAL CHARACTERISTICS

Case	DO-201A
Marking	Alpha-numeric
Pin out	Cathode band



	DO-201A			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.190	0.260	4.826	6.604
BL	0.285	0.375	7.240	9.530
LD	0.048	0.052	1.219	1.321
LL	1.000	-	25.400	-

MBR320, MBR330, MBR340

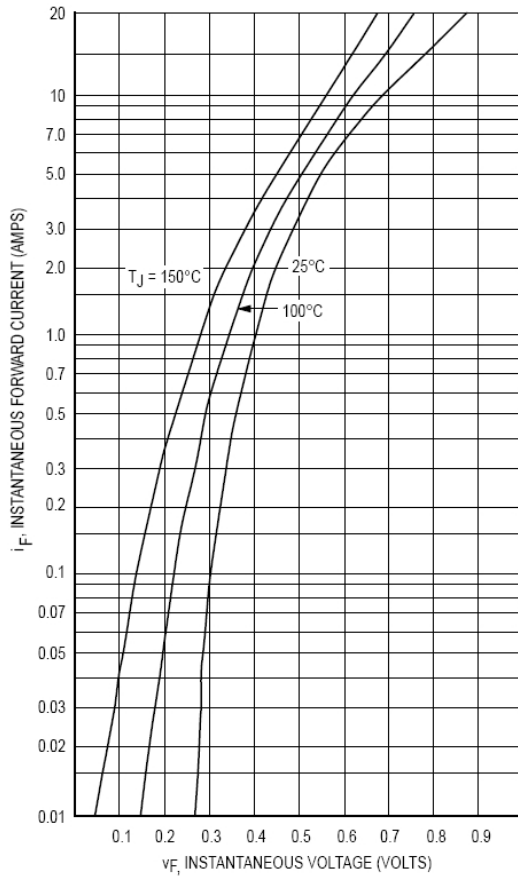


Figure 1. Typical Forward Voltage

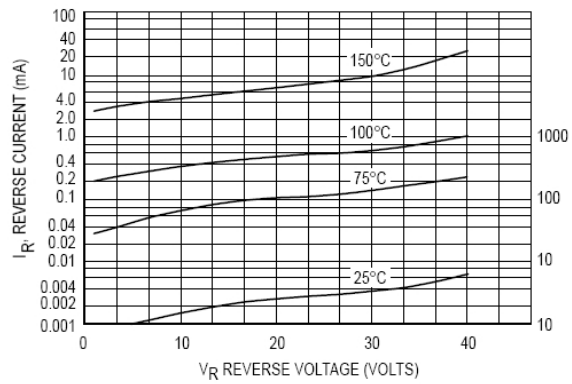


Figure 2. Typical Reverse Current*

*The curves shown are typical for the highest voltage device in the voltage grouping. Typical reverse current for lower voltage selections can be estimated from these same curves if V_R is sufficiently below rated V_R .

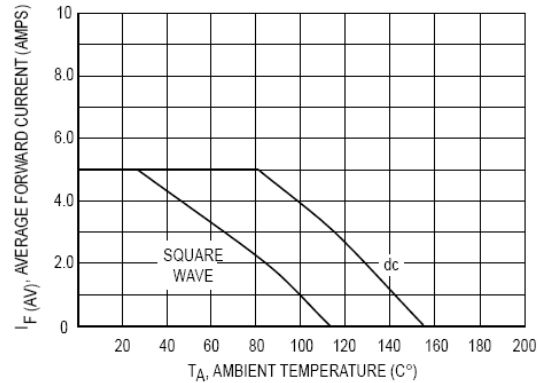


Figure 3. Current Derating
(Mounting method #3 per note 1)

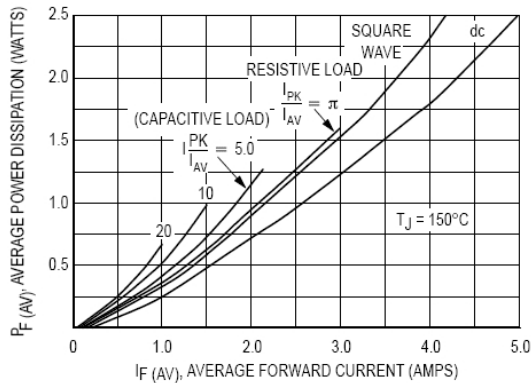


Figure 4. Power Dissipation

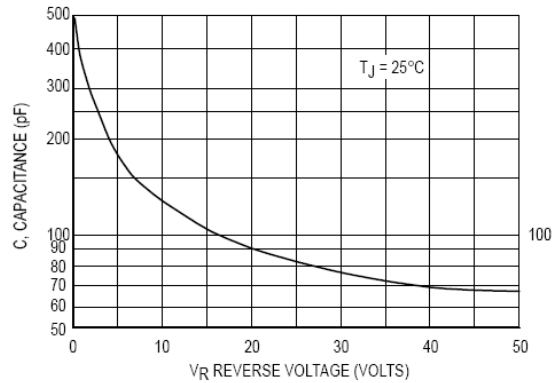


Figure 5. Typical Capacitance

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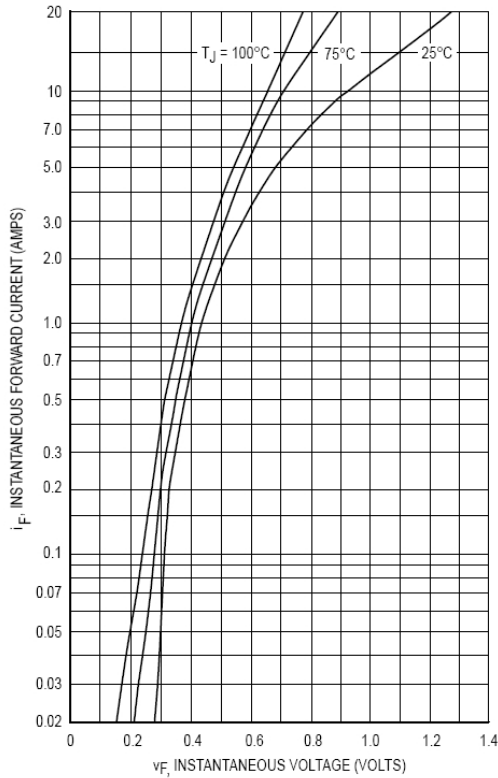


Figure 6. Typical Forward Voltage

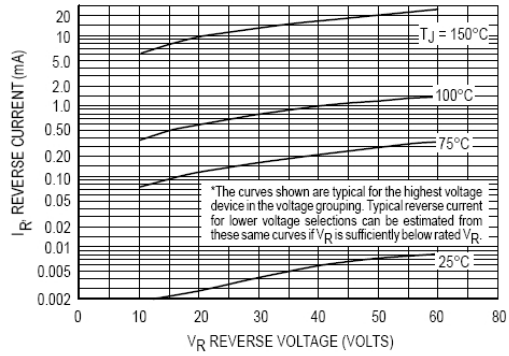


Figure 7. Typical Reverse Current*

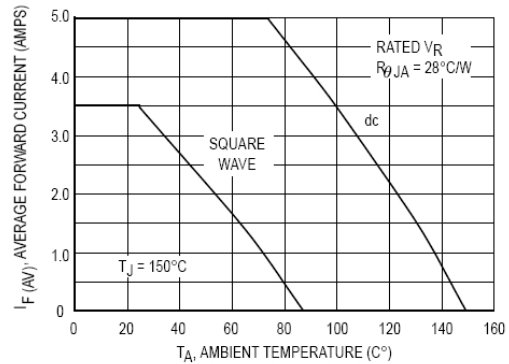


Figure 8. Current Derating Ambient
(Mounting method #3 per note 1)

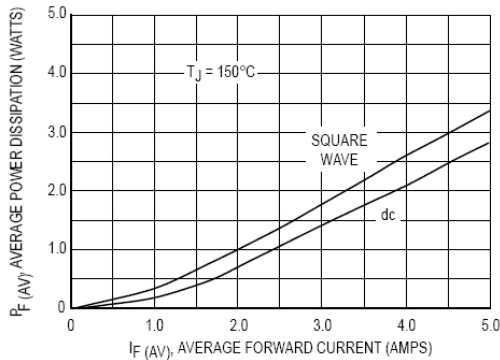


Figure 9. Power Dissipation

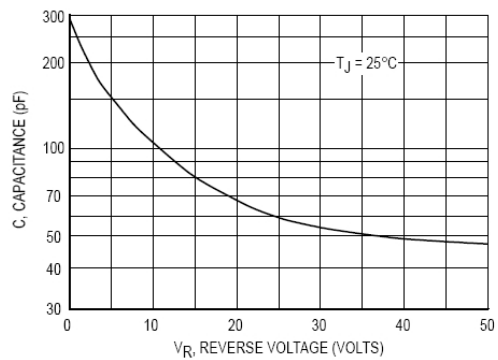


Figure 10. Typical Capacitance