

**Microsemi Corp.**  
The diode experts



**MB200 thru MB206  
MB207 thru MB213**

SANTA ANA, CA

For more information call:  
(714) 979-8220

**FEATURES**

- Microminiature package.
- Voidless hermetically sealed glass package.
- Triple layer passivation.
- Metallurgically bonded.
- Ultra fast recovery.
- PIV to 215 volts.
- Meet or exceed requirements of MIL-S-19500.

**MAXIMUM RATINGS**

Operating Temperature: -65°C to +175°C.

Storage Temperature: -65°C to +200°C.

\*Power Dissipation: 2 Watts @ 25°C.

\*This rating applies when diodes are mounted on turret terminals (.060" diameter x .375" minimum height) on .5" centers in free air. With fan cooling of at least 250 linear feet per minute air velocity this rating is 3.0 watts at 25°C.

**ELECTRICAL CHARACTERISTICS**

TYPE	PEAK INVERSE VOLTAGE (MIN.) PIV	BREAKDOWN VOLTAGE (MIN.) $B_V$ @ 100 $\mu$ A	AVERAGE RECTIFIED CURRENT $I_0$	FORWARD VOLTAGE DROP (MAX.) $V_F$	REVERSE CURRENT (MAX.) $I_R$ @ PIV		SURGE CURRENT (MAX.) (NOTE 1) $I_F$ (surge)	JUNCTION CAPACITANCE (MAX.) C @ V		REVERSE RECOVERY TIME (MAX.) (NOTE 2)
					$\mu$ A			pF		
					25°C	100°C		0V	-10V	
	VOLTS	VOLTS	AMPS	VOLTS			AMPS			n sec
			$T_A$ 55°C							
MB200	40	55	2.0	1.0V	.5	100	25	35	20	20
MB201	65	85	2.0	@	.5	100	25	35	20	20
MB202	90	110	2.0	1.667 Adc	.5	100	25	35	20	20
MB204	135	165	2.0	(250 msec pulse)	.5	100	25	35	20	20
MB206	185	215	2.0		1.5	200	25	35	20	20
MB207	40	55	2.0	1.0V	1.0	200	25	25	15	20
MB208	65	85	2.0	@	1.0	200	25	25	15	20
MB209	90	110	2.0	1.25 Adc	1.0	200	25	25	15	20
MB211	135	165	2.0	(250 msec pulse)	1.0	200	25	25	15	20
MB213	185	215	2.0		3.0	400	25	25	15	20

NOTE 1: Single cycle 8.3 msec surge

NOTE 2:  $I_F = 1A$ ,  $I_R = 1.0A$ , recover to .5A

**RECTIFIERS**

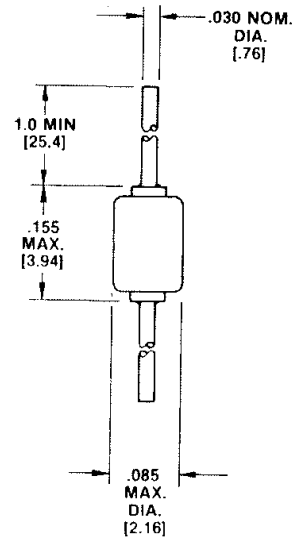


FIGURE 1  
PACKAGE A

**MECHANICAL CHARACTERISTICS**

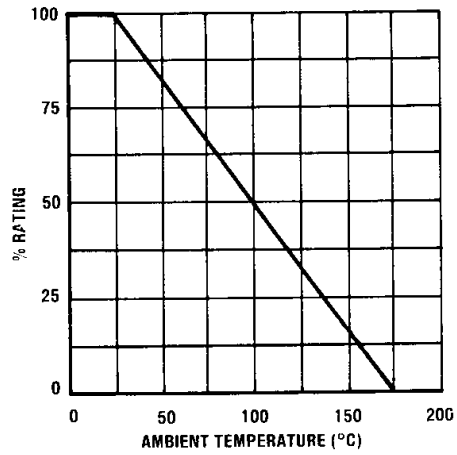
CASE: Hermetically sealed hard glass.

LEAD MATERIAL: Tinned copper.

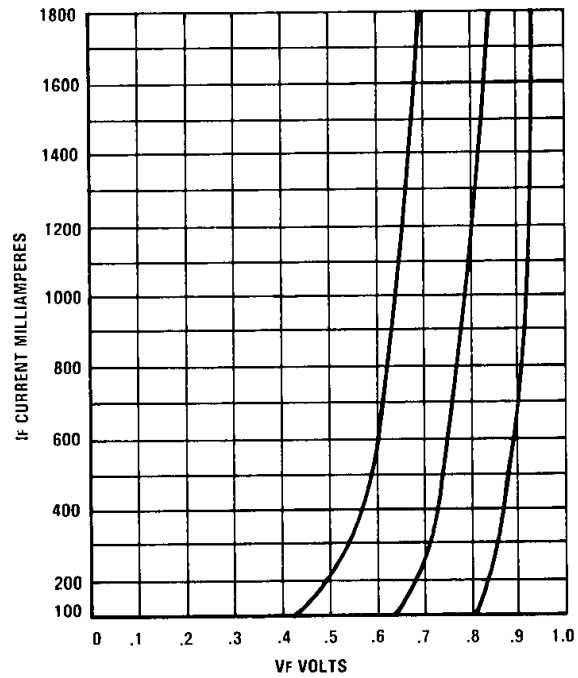
MARKING: Body painted, alpha numeric.

POLARITY: Cathode band.

# MB200 thru MB206 MB207 thru MB213



**FIGURE 2  
TEMPERATURE  
DERATING CURVE**



**FIGURE 3  
FORWARD CONDUCTANCE CURVE\*\***

\*\*Special band spread requirements can be supplied upon request.