

**Major Ratings and Characteristics**

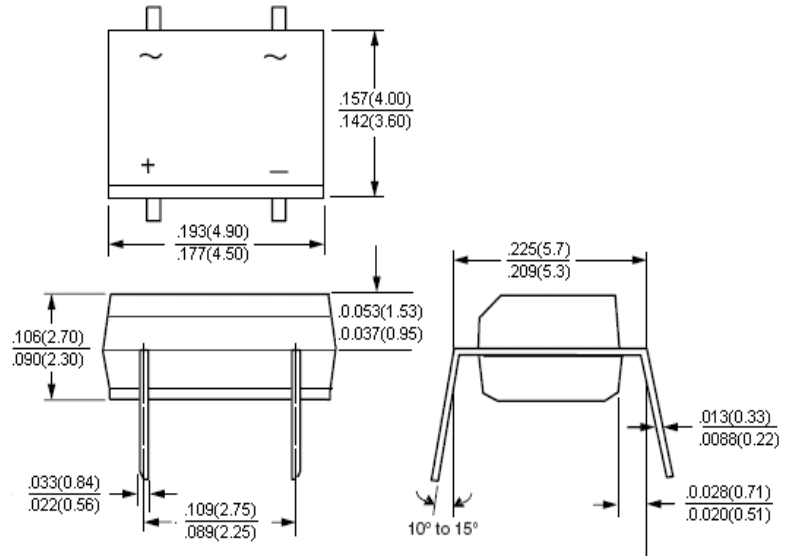
$I_{F(AV)}$	<b>0.5A</b>
$V_{RRM}$	<b>50-1000V</b>
$I_{FSM}$	<b>35 A</b>
$I_R$	<b>5.0 <math>\mu</math>A</b>
$V_F$	<b>1.0V</b>
$T_j \text{ max.}$	<b>150 °C</b>


**Features**

- Low profile space
- Ideal for automated placement
- Glass passivated chip junction
- Low forward voltage drop
- High forward surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

**Mechanical Date**

- Case: MBM Molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity: Polarity symbols marked on body


**Maximum Ratings & Thermal Characteristics & Electrical Characteristics**

( $T_A = 25\text{ °C}$  unless otherwise noted)

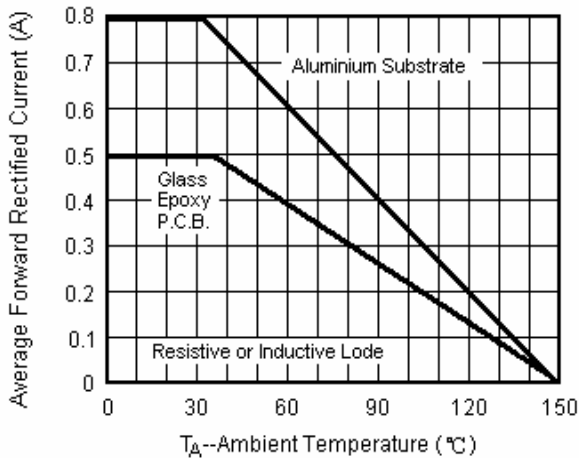
	MB-	Symbol	05M	1M	2M	4M	6M	8M	10M	UNIT
Maximum repetitive peak reverse voltage		$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage		$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage		$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward output rectified current -on glass-epoxy P.C.B(NOTE 1) -on aluminum substrate(NOTE 2)		$I_{F(AV)}$				0.5 0.8				A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load(JEDEC Method)		$I_{FSM}$				35				A
Maximum instantaneous forward voltage drop per leg at 0.4A		$V_F$				1.0				V
Maximum DC reverse current at rated DC blocking voltage per leg $T_A = 25\text{ °C}$ $T_A = 125\text{ °C}$		$I_R$				5.0 500				$\mu$ A
Typical junction capacitance per leg at 4.0 V ,1MHz		$C_J$				13				p F
Thermal resistance per leg	(NOTE 1)	$R_{\theta JA}$				85				$^{\circ}$ C/ W
	(NOTE 2)	$R_{\theta JA}$				70				
	(NOTE 1)	$R_{\theta JL}$				20				
Operating junction and storage temperature range		$T_J, T_{STG}$				-55 to +150				$^{\circ}$ C

NOTE1:On glass epoxy P.C.B. mounted on 0.05×0.05" (1.3×1.3mm) pads

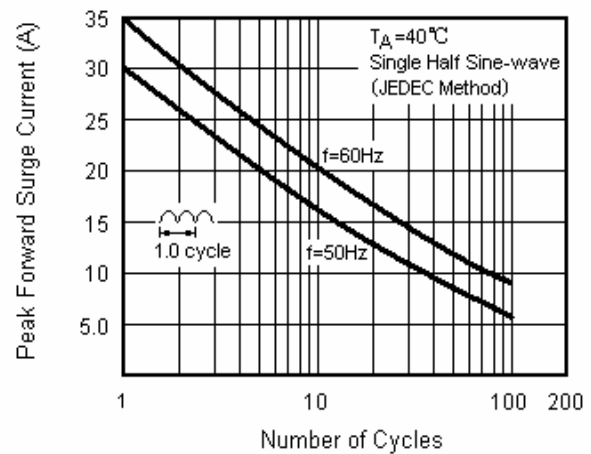
NOTE2:On aluminum substrate P.C.B. with an area of 0.8×0.8" (20×20mm) mounted on 0.05×0.05" (1.3×1.3mm) solder pad

**Characteristic Curves** ( $T_A=25\text{ }^\circ\text{C}$  unless otherwise noted)

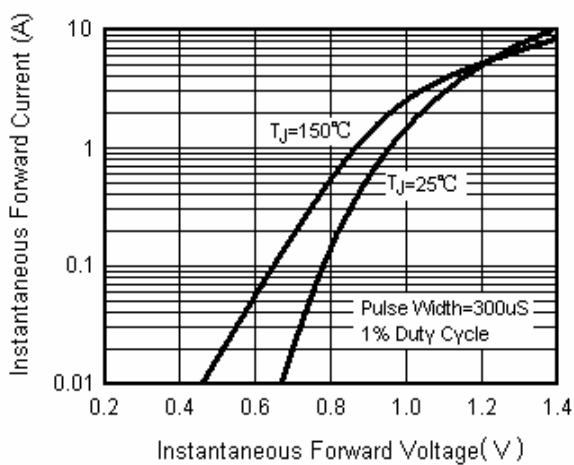
**Fig.1 Derating Curve For Output Rectified Current**



**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



**Fig.3 Typical Forward Voltage Characteristics Per Leg**



**Fig.4 Typical Reverse Leakage Characteristics Per Leg**

