

Miniature Glass Passivated Single-Phase Bridge Rectifier
Major Ratings and Characteristics

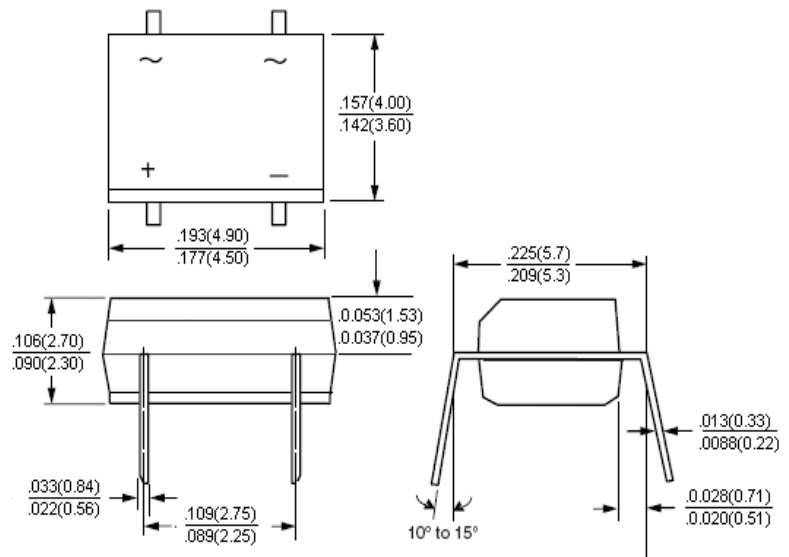
$I_{F(AV)}$	1.0A
V_{RRM}	50-1000V
I_{FSM}	35 A
I_R	5.0 μA
V_F	1.0V
$T_j \text{ max.}$	150 °C


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

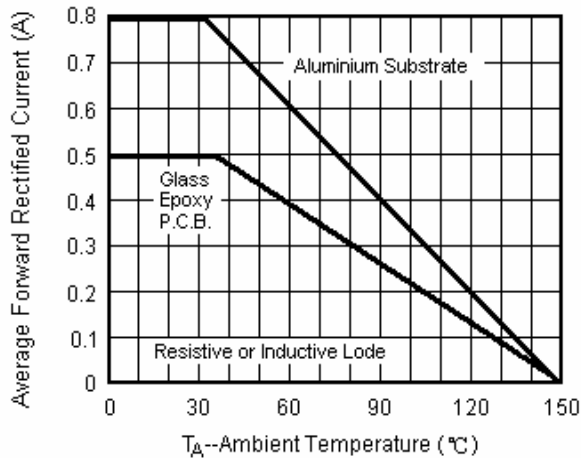
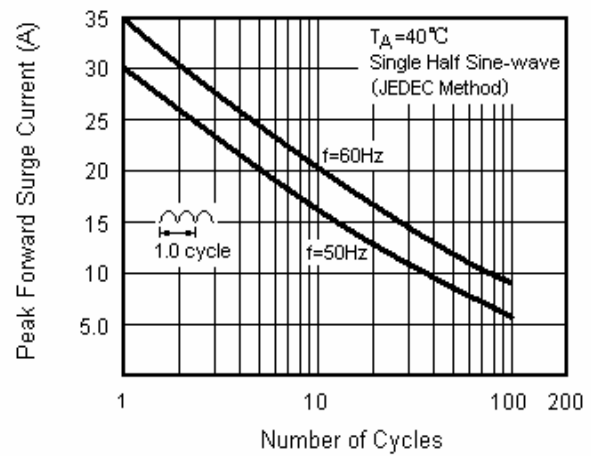
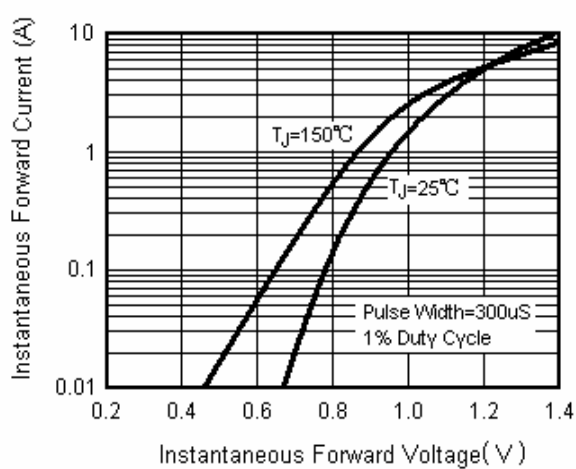
($T_A = 25\text{ °C}$ unless otherwise noted)

	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)		$I_{F(AV)}$				1.0				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				μ 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

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Characteristic Curves ($T_A=25^\circ\text{C}$ 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
