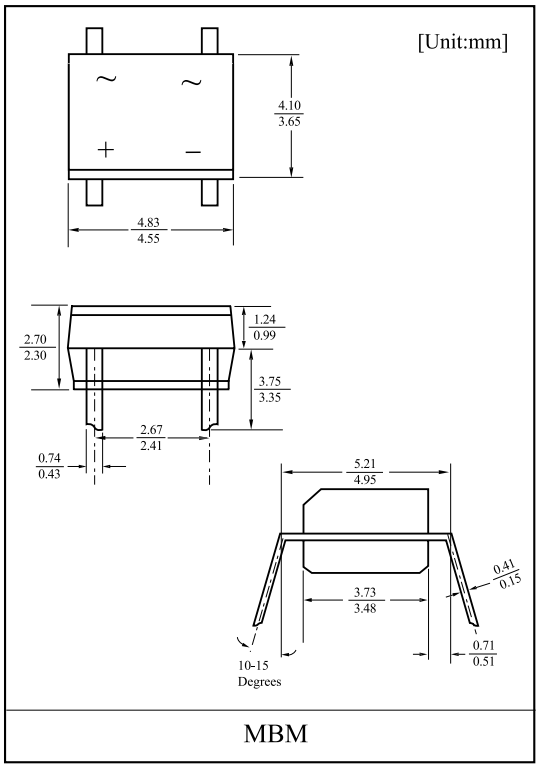
MB6M

Single-Phase Bridge Rectifiers

FEATURES

- Plastic package has Underwriters Laboratory flammability Classification 94V-0.
- Glass passivated chip junction.
- High surge overload rating : 35A peak.
- Saves space on printed circuit boards.
- Recommended for non-automotive applications.

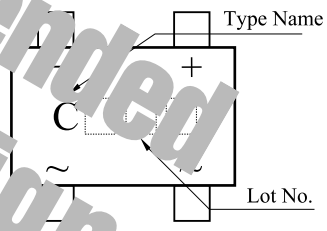


MBM

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC	SYMBOL	RATING	UNIT
repetitive peak reverse voltage	V_{RRM}	600	V
RMS voltage	V_{RMS}	420	V
DC blocking voltage	V_{DC}	600	V
Average forward output rectified current (see Fig.1) On glass-epoxy P.C.B on aluminum substrate.		0.5 (Note1) 0.8 (Note2)	A
Peak forward surge current	I_{FSM}		A
Rating for fusing (t<8.3ms)	I^2t		
Operating Junction and Storage Temperature Range	, Tstg	-55~150	

Marking



ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	CONDITION	MIN	TYP	MAX	UNIT
Forward voltage		V_F	I_F=0.4A	-	-	1.0	V
Leakage current	Ta=25℃	I_R	V_R=600V	-	-	5.0	μA
	Ta=125℃			-	-	100	
Junction capacitance		C_J	V_R=4.0V, f=1.0MHz	-	13	-	pF
Typical thermal resistance		R_{th}(A) (Note1)	Junction to ambient	-	-	85	℃/W
		R_{th}(A) (Note 2)				70	
		R_{th}(L) (Note 1)	Junction to lead	-	-	20	

Note 1) on glass epoxy P.C.B mounted on 0.05×0.05 "(1.3×1.3mm) Pads.
Note 2) 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.

Fig.1 Derating Curve for Output Rectified Current

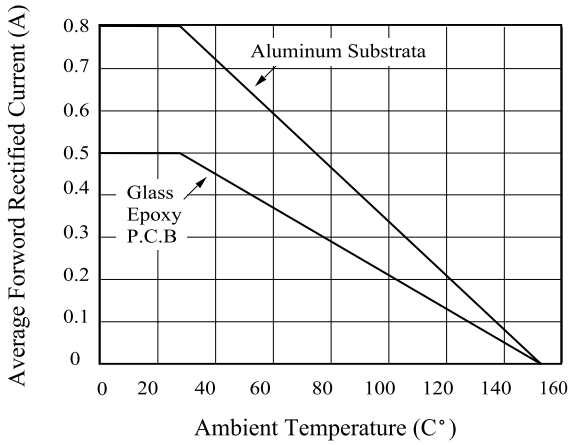


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg

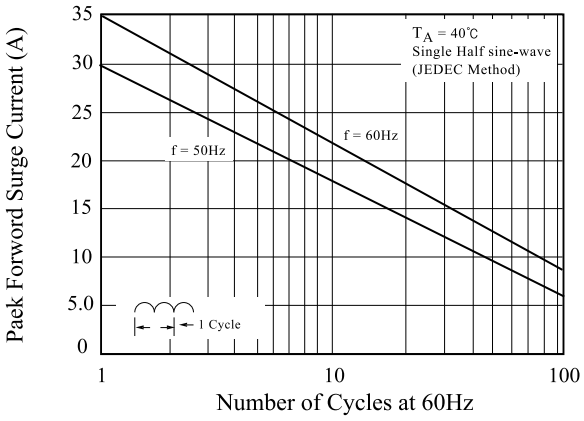


Fig.3 Typical Forward Characteristics Per Leg

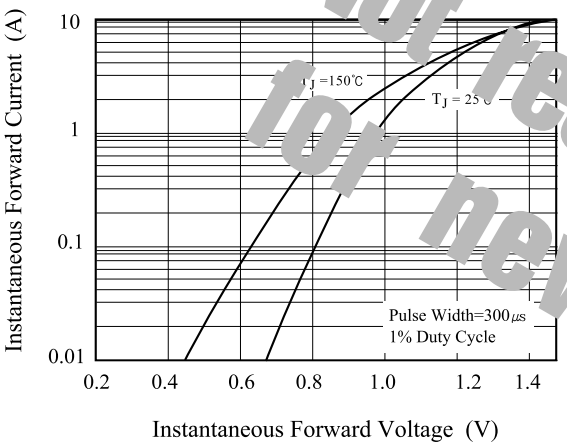


Fig.4 Typical Reverse Leakage Characteristics Per Leg

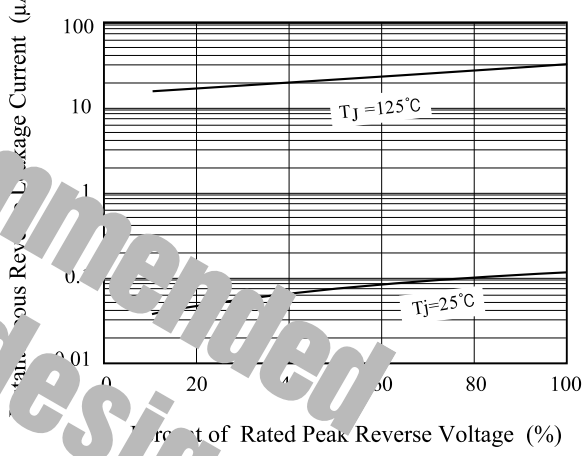


Fig.5 Typical Junction Capacitance Per Leg