MB05S --- MB10S

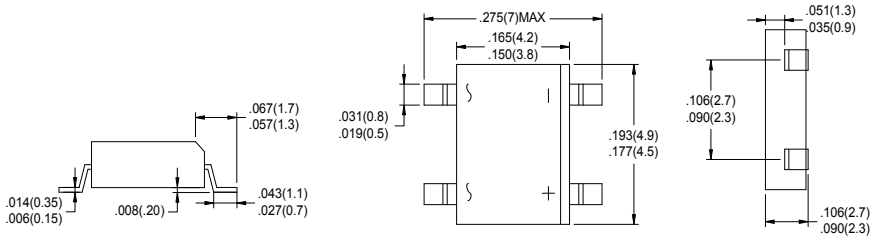
FEATURES

- UL Recognized Component
- Ideal for Printed Circuit Board
- Simple, Compact Structure for Trouble-free Performance
- Plastic Package - UL Flammability Classification 94V-0

CASE:MB-S

Mechanical Data

- Case: Transfer Molded Epoxy
- Mounting Position: Any
- Polarity: Polarity Symbols Marked on Body



Unit：mm

Maximum Ratings and Electrical Characteristics (Ta=25 ℃ unless otherwise noted)

Characteristic	Symbo	MB05S	MB1S	MB2S	MB4S	MB6S	MB10S	Unit
Peak RepetitiVe ReVerse Voltage Working Peak ReVerse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	1000	V
RMS ReVerse Voltage	$V_{R(RMS)}$	35	70	140	280	420	700	V
AVerage Rectified Output Current (Note 1) @T_A = 40°C AVerage Rectified Output Current (Note 2) @T_A = 40°C	I_O	0.5 0.8						A
Non-RepetitiVe Peak Forward Surge Current 8.3ms Single half sine-waVe superimposed on rated load (JEDEC Method)	I_{FSM}	30						A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	5.0						A^2s
Forward Voltage per element @I_F = 0.5A	V_{FM}	1.0						V
Peak ReVerse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	5.0 500						μA
Typical Junction Capacitance per leg (Note 3)	C_j	13						pF
Typical Thermal Resistance per leg (Note 1)		70 20						°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150						°C

Notes: 1. Thermal resistance from junction to ambient mounted on PC board with 13mm x 13mm copper pads.
2. 60 Hz resistive or inductive load.
3. For capacitive load, derate current by 20%.

MB05S --- MB10S CHARACTERISTIC CURVES

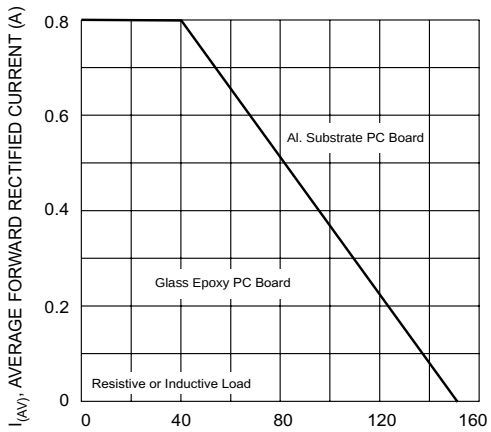


Fig. 1 Output Current Derating Curve

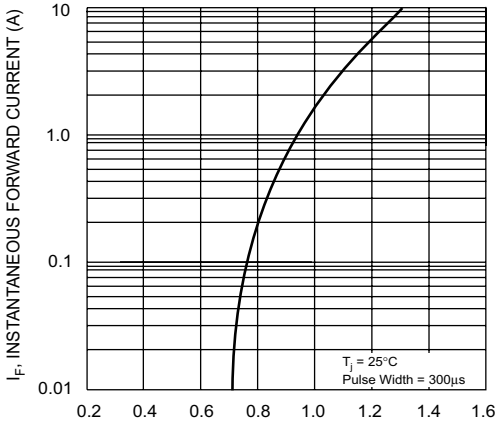


Fig. 2 Typical Forward Characteristics (per leg)

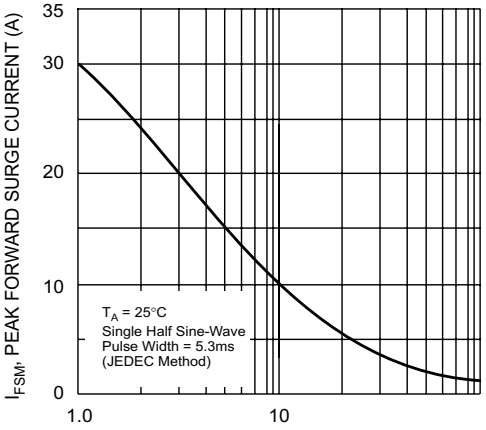


Fig. 3 Maximum Peak Forward Surge Current (per leg)

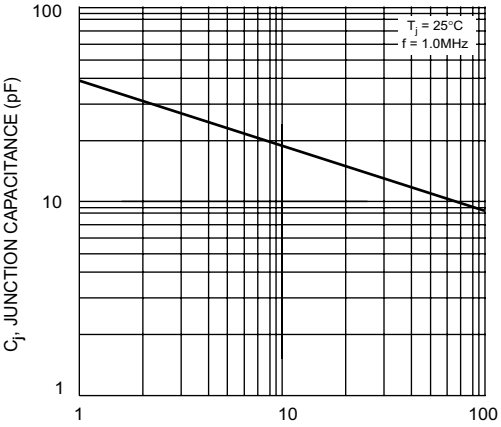


Fig. 4 Typical Junction Capacitance

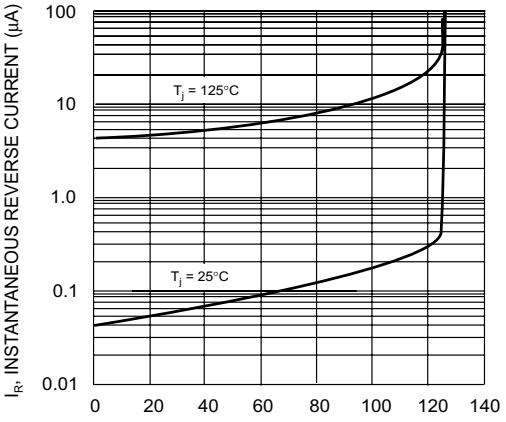


Fig. 5 Typical Reverse Characteristics (per element)