

# MB105S thru MB110S

**SURFACE MOUNT GLASS PASSIVATED  
BRIDGE RECTIFIERS**

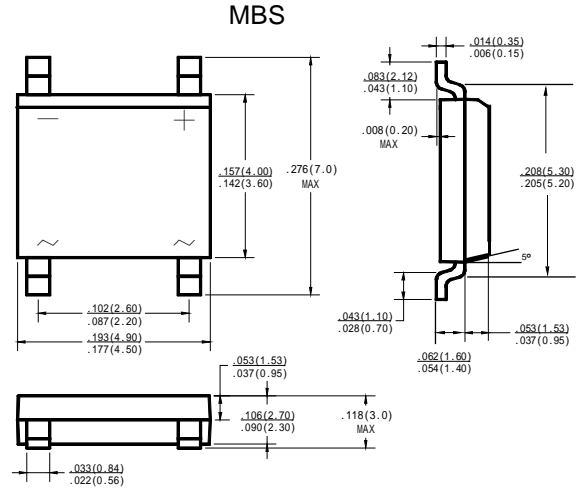
**REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 1.0 Ampere**

## FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin plated copper

## MECHANICAL DATA

- Polarity: Symbol molded on body
- Mounting position :Any



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	MB105S	MB11S	MB12S	MB14S	MB16S	MB18S	MB110S	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (Note 1) @TA=40 °C	I(AV)	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	30							A
Peak Forward Voltage at 1.0A DC	VF	1.1							V
Maximum DC Reverse Current @TJ=25°C at Rated DC Bolcking Voltage @TJ=125°C	IR	5.0							µA
Typical Junction Capacitance Per Element (Note2)	CJ	10							pF
Thermal Resistance (Note3)	RθJA	95							°C/W
Thermal Resistance (Note4)	RθJC	30							°C/W
Operating Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TSTG	-55 to +150							°C

NOTES:1.Mounted on P.C. board.

2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3.Thermal resistance junction to ambient

4.Thermal resistance junction to case

# RATING AND CHARACTERISTIC CURVES MB105S thru MB10S

FIG.1-FORWARD CURRENT DERATING CURVE

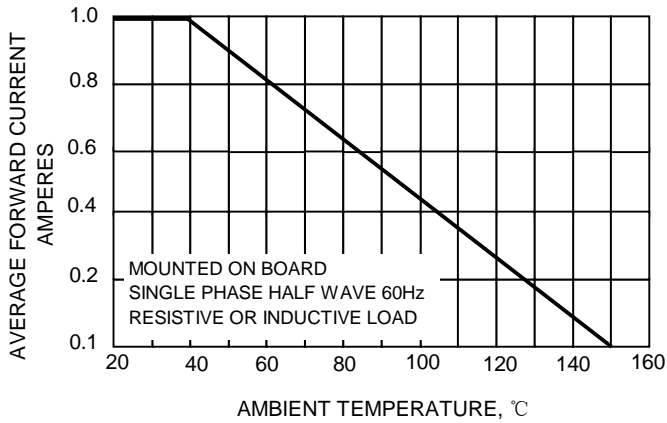


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

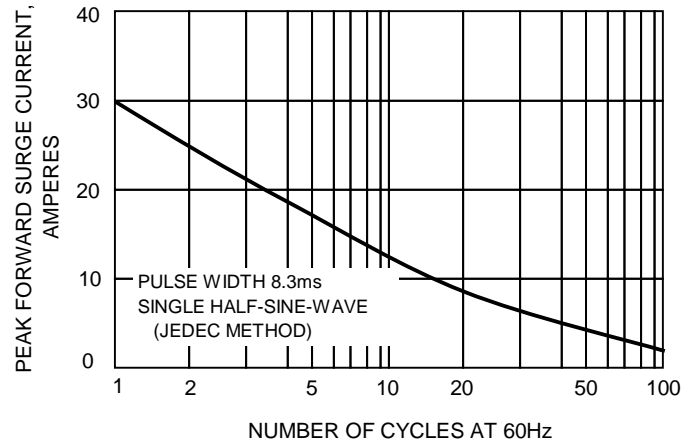


FIG.3-TYPICAL REVERSE CHARACTERISTICS

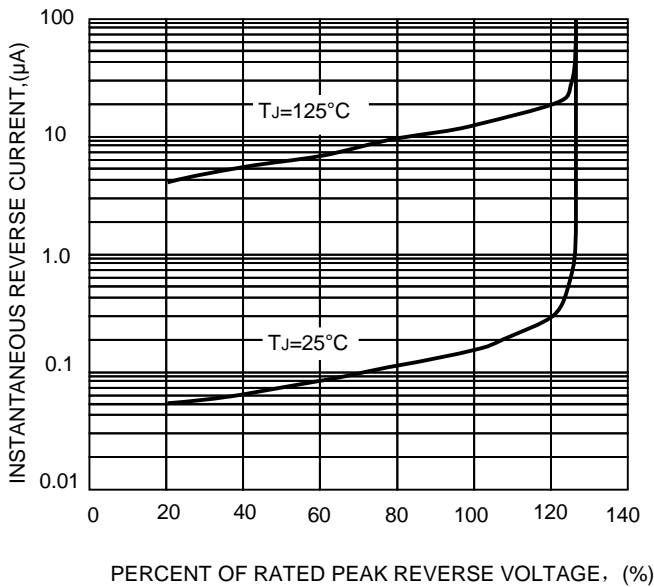


FIG.4-TYPICAL FORWARD CHARACTERISTICS

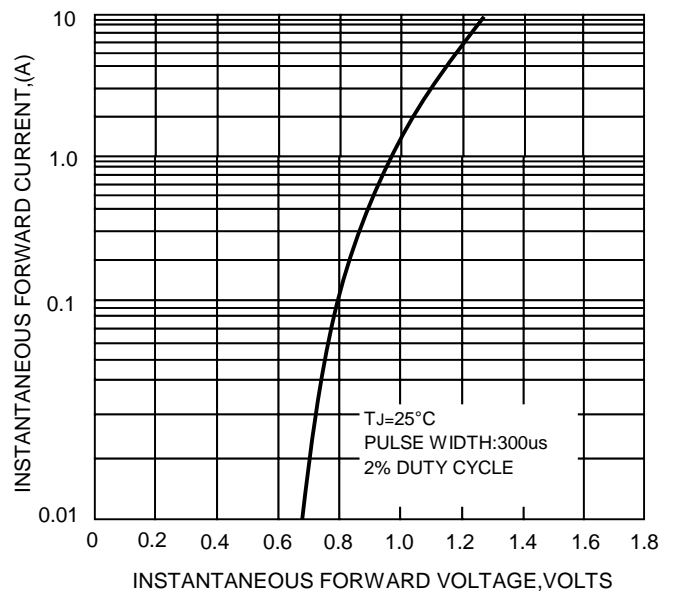


FIG.5-TYPICAL JUNCTION CAPACITANCE

