



# MBS/YJ SERIES

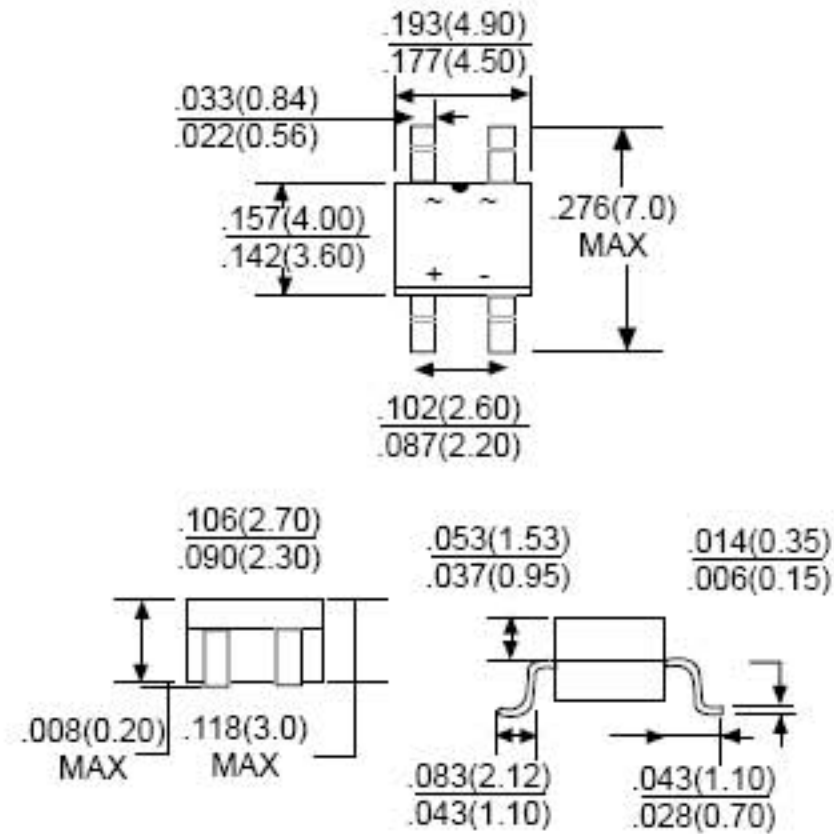
**SINGLE PHASE 0.5 AMPS.  
GLASS PASSIVATED BRIDGE  
RECTIFIERS**

**Voltage Range  
200 to 1000 Volts  
Current  
0.5 Amperes**

## Features

- Ideal for printed circuit board  
Reliable low cost construction utilizing  
molded plastic technique
- High surge current capability
- High temperature soldering guaranteed:  
260°C / 10 seconds at 5 lbs., (2.3kg)  
tension
- Small size, simple installation
- Leads solderable per MIL-STD-202  
Method 208

## MBS



Dimensions in inches and (millimeters)

## 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%

Type Number		MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
		YJ2J	YJ4J	YJ5J	YJ6J	YJ7J	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	200	400	600	800	1000	V
Maximum Average Forward Rectified Current On glass-epoxy P.C.B. On aluminum substrate	I <sub>F(AV)</sub>	0.5 (1) 0.8 (2)					A
Peak Forward Surge Current, 8.3 ms Single Half Sinewave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	35					A
Maximum Instantaneous Forward Voltage Drop Per Leg@0.4A	V <sub>F</sub>	1.0					V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	I <sub>R</sub>	5.0 100					uA uA
Typical Junction Capacitance Per Leg (Note3)	C <sub>J</sub>	15					pF
Typical Thermal Resistance Per Leg	R* <sub>JA</sub>	75					°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150					°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150					°C

Note: 1. On glass epoxy P.C.B mounted on 0.05x 0.05" (1.3x1.3mm) pads  
2. On aluminum substrate P.C.B with on area of 0.8"x 0.8" (20x20mm) mounted on  
0.05x 0.05" (1.3x1.3mm) solder pad  
3. Measured at 1.0MHz and applied reverse voltage of 4.0 volts.

# RATING AND CHARACTERISTIC CURVES

## MBS/YJ SERIES (TA=25°C unless otherwise noted)



FIG.1 - DERATING CURVE OUTPUT RECTIFIED CURRENT FOR

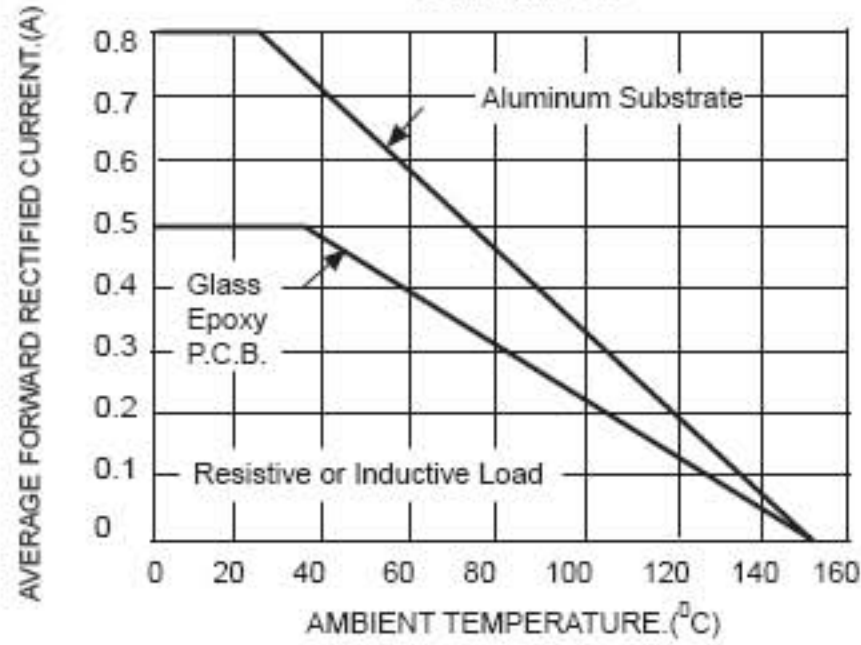


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

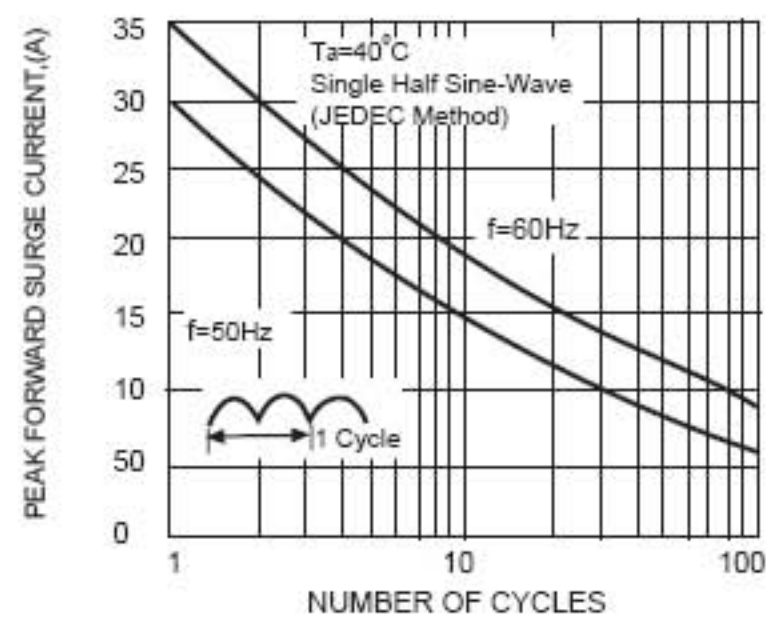


FIG.3 - TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

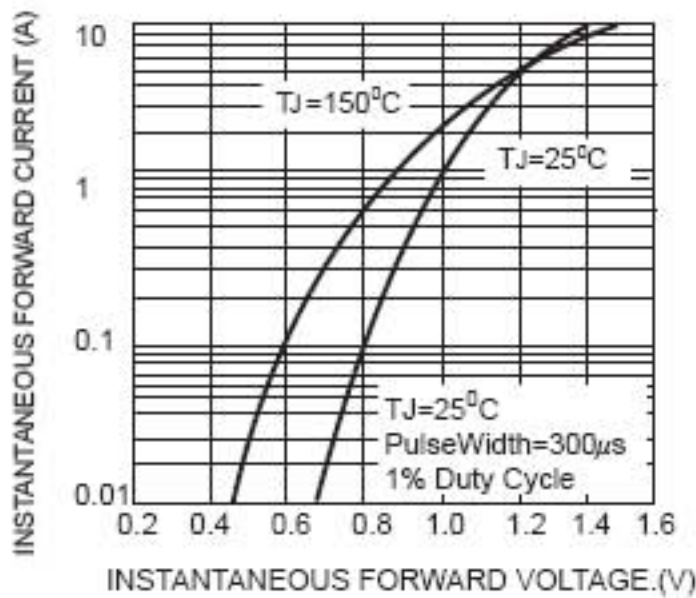


FIG.4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

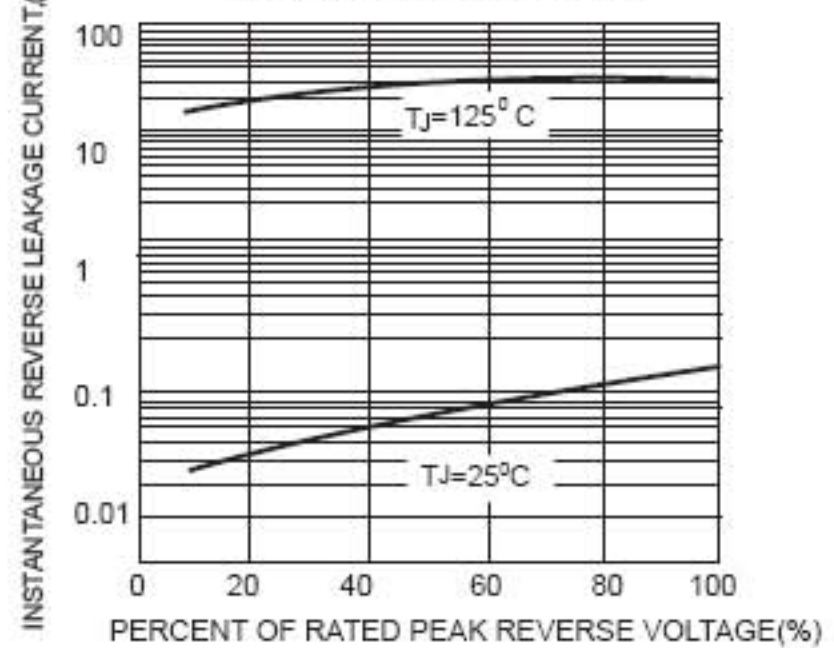


FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG

