



YUYUE

SINGLE PHASE 3.0 AMP SURFACE MOUNT BRIDGE RECTIFIERS



## FEATURES

- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded plastic technique
- \* High surge current capability
- \* Polarity: Symbol molded on body
- \* Mounting position: Any
- \* Weight: 0.12 grams

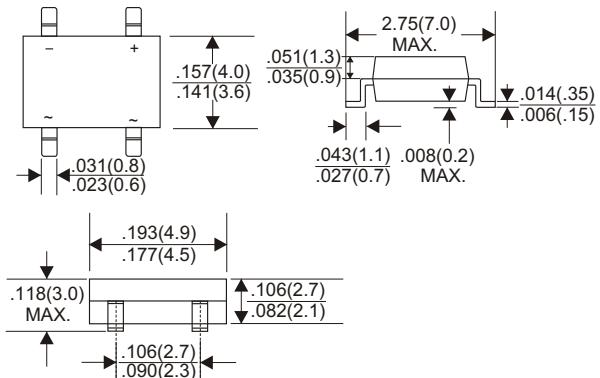
## VOLTAGE RANGE

20 to 200 Volts

## CURRENT

3.0 Ampere

## MBS



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

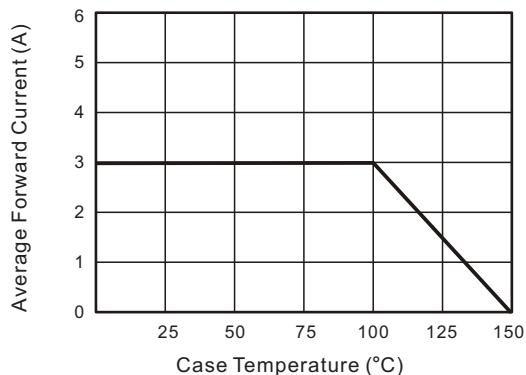
Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	MB32S	MB34S	MB36S	MB38S	MB310S	MB315S	MB320S	UNIT
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current at Ta=40°C (Note 1)						3.0		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)						8.0		A
Maximum Forward Voltage Drop per Bridge Element at 3.0A D.C.	0.55	0.7	0.85	0.9				V
Maximum DC Reverse Current      Ta=25°C	0.3		0.2	0.1				mA
at Rated DC Blocking Voltage      Ta=125°C	10		5	2				mA
Typical Thermal Resistance R <sub>JA</sub> (Note 2)			100					°C/W
Operating Temperature Range, T <sub>J</sub>			-55 — +150					°C
Storage Temperature Range, T <sub>STG</sub>			-55 — +150					°C

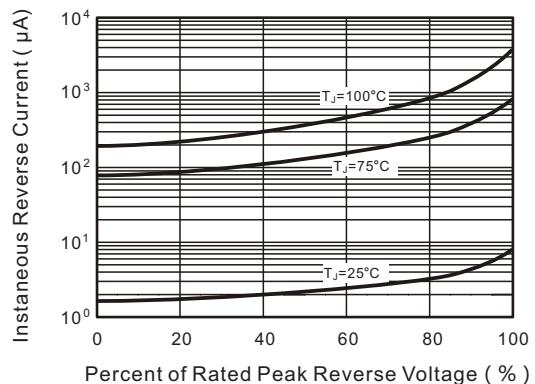
NOTES: 1. Mounted on P.C. Board.  
2. Thermal Resistance Junction to Ambient.

## RATING AND CHARACTERISTIC CURVES (MB32S THRU MB320S)

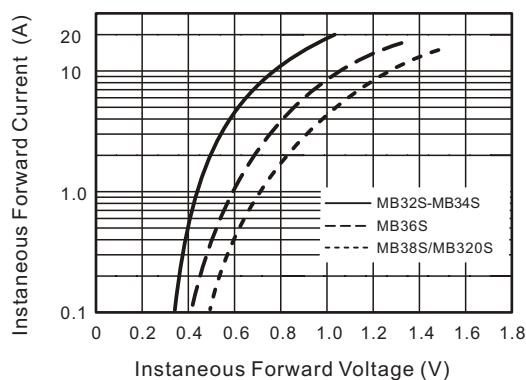
**Fig.1 Forward Current Derating Curve**



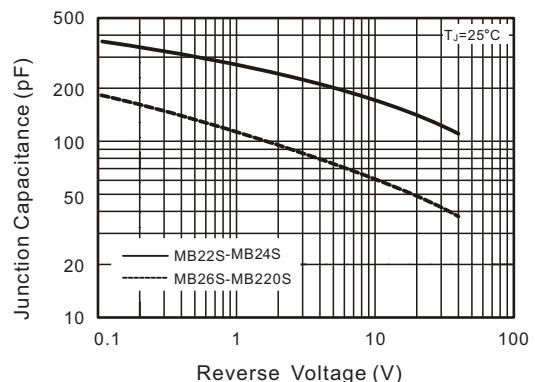
**Fig.2 Typical Reverse Characteristics**



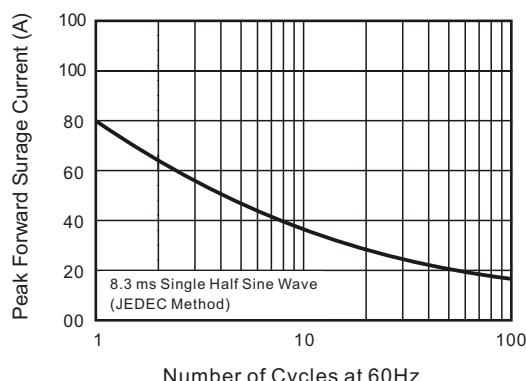
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**

