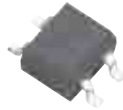
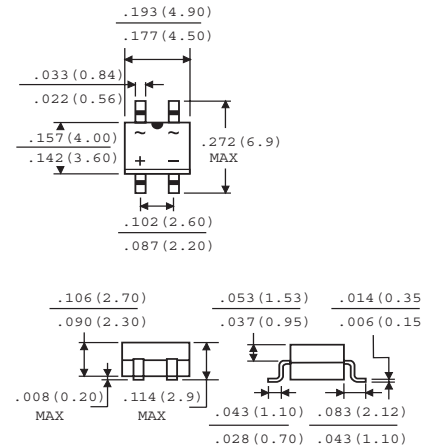


# MBF2-MBF10

## Schottky Surface Mount Flat Bridge Rectifier



### MBS



Dimensions in inches and (millimeters)

### Features

- ✧ Low profile package
- ✧ Ideal for automated placement
- ✧ Ultrafast reverse recovery time
- ✧ Low power losses, high efficiency
- ✧ Low forward voltage drop
- ✧ High surge capability
- ✧ High temperature soldering:  
260°C/10 seconds at terminals

### Mechanical Data

- ✧ **Case:** MBF molded plastic body over Schottky barrier chips
- ✧ **Polarity:** Polarity symbols marked on body

### Maximum Ratings & Thermal Characteristics & Electrical Characteristics

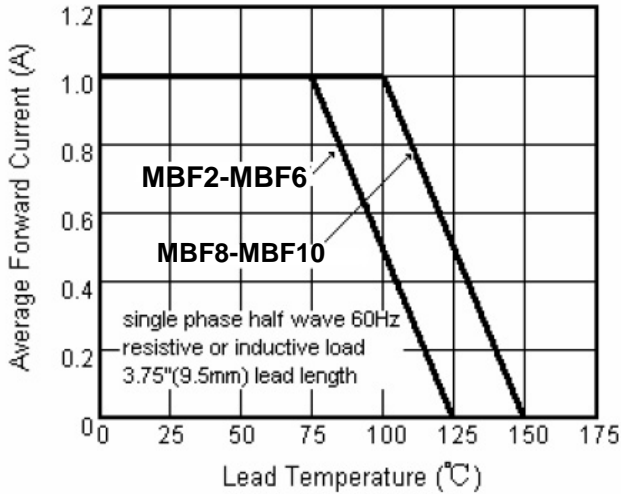
( $T_A = 25^\circ\text{C}$  unless otherwise noted)

	Symbol	MBF2	MBF4	MBF6	MBF8	MBF10	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	40	60	80	100	V
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	V
Maximum DC blocking voltage	$V_{DC}$	20	40	60	80	100	V
Maximum average forward rectified current 0.2×0.2"(5.0×5.0mm)copper pad area	$I_{F(AV)}$	1.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	30					A
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.50	0.55	0.70	0.85		V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at Rated DC blocking voltage $T_A = 100^\circ\text{C}$	$I_R$	0.5 20					mA
Typical Junction Capacitance at 4.0V,1.0MHz	$C_J$	250			125		pF
Typical Thermal resistance (Note1)	$R_{\theta JA}$ $R_{\theta JL}$	85 20					$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-55 to +125					$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 to +150					$^\circ\text{C}$

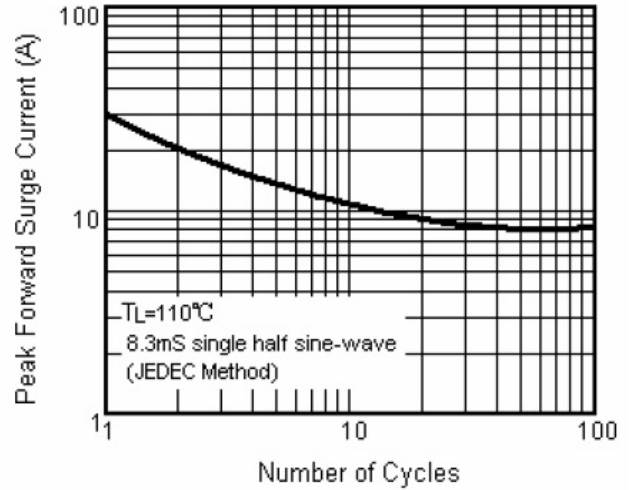
Note: 1.Thermal resistance from junction to ambient and from junction to lead P.C.B.mounted on 0.2×0.2"(5.0×5.0mm)copper pad areas.

### Characteristic Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

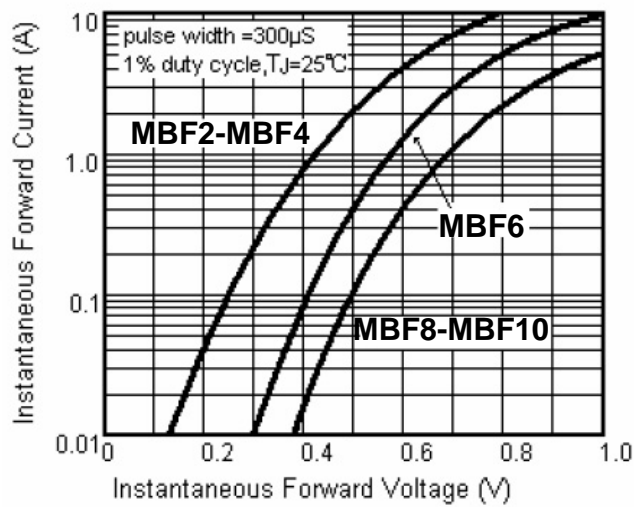
**Fig.1 Forward Current Derating Curve**



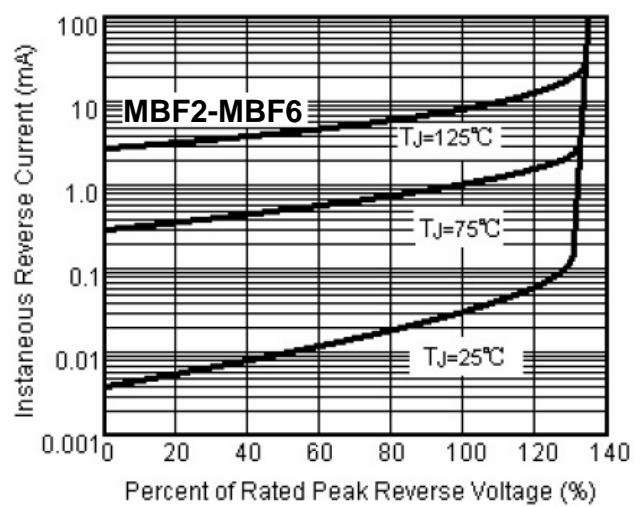
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



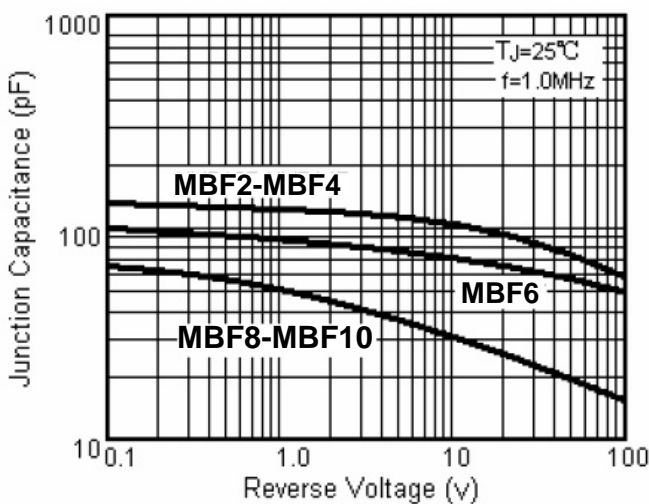
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4A Typical Reverse Characteristics**



**Fig.5 Typical Junction Capacitance**



**Fig.4B Typical Reverse Characteristics**

