

MBF2-MBF10

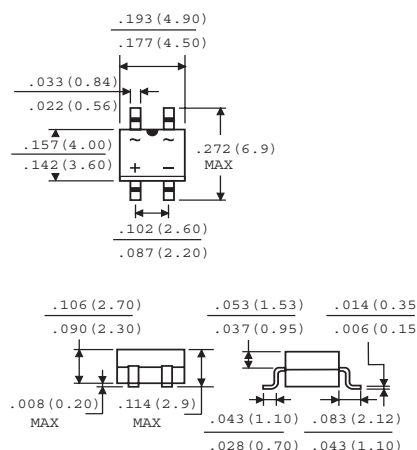
Schottky Surface Mount Flat Bridge Rectifier



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

MBS



Dimensions in inches and (millimeters)

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 forwad voltage at 1.0A	V _F	0.50	0.55	0.70	0.85		V
Maximum DC reverse current T _A = 25 °C at Rated DC blocking voltage T _A = 100 °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 _{θJA} R _{θJL}	85 20					°C/ W
Operating junction temperature range	T _J	−55 to +125					°C
Storage temperature range	T _{STG}	− 55 to +150					°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

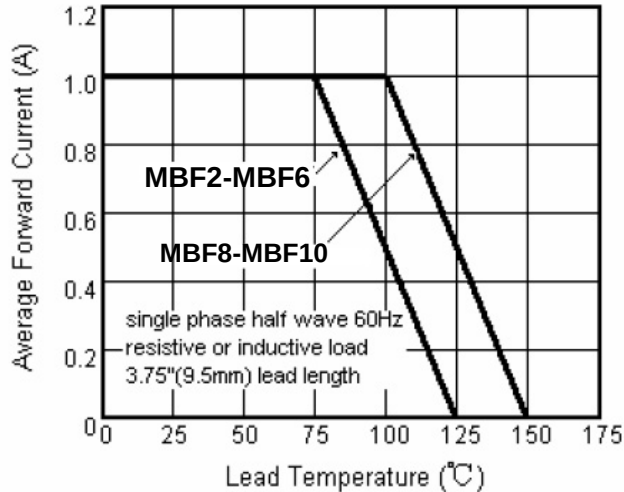


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

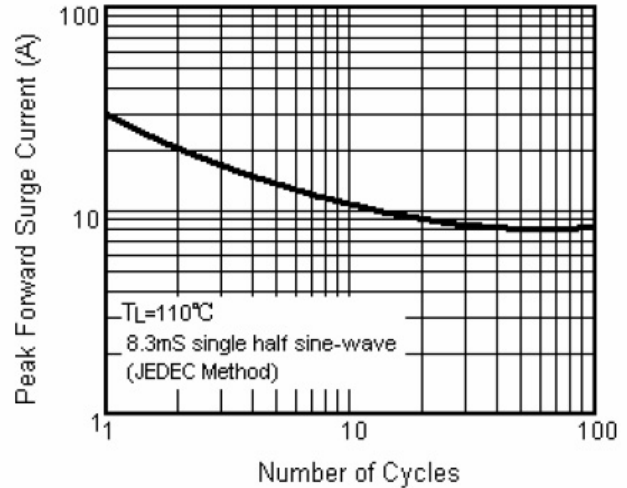


Fig.3 Typical Instantaneous Forward Characteristics

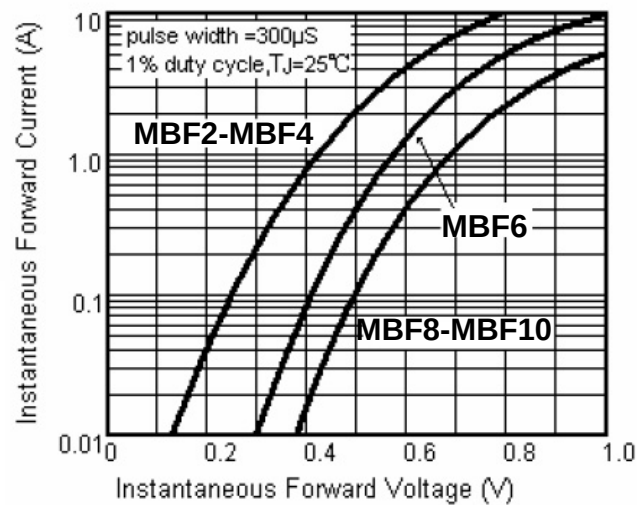


Fig.4A Typical Reverse Characteristics

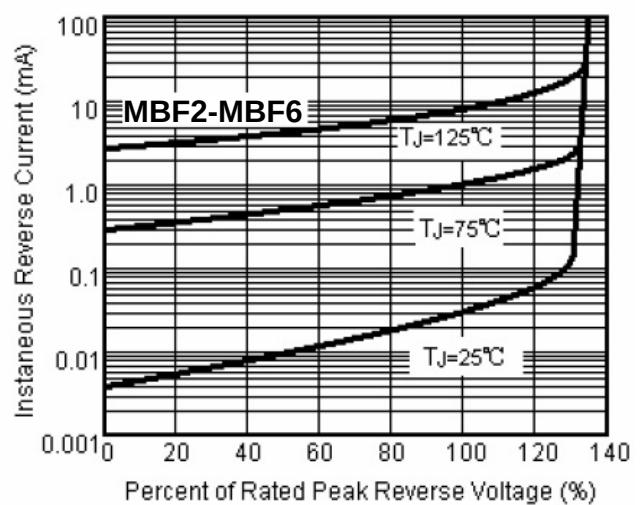


Fig.5 Typical Junction Capacitance

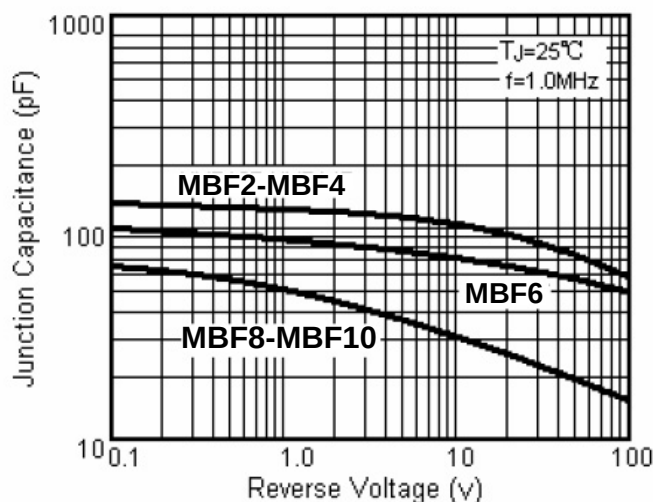


Fig.4B Typical Reverse Characteristics

