

## Schottky Surface Mount Flat Bridge Rectifier



MBF

### PINNING

PIN	DESCRIPTION
1	Input Pin ( ~ )
2	Input Pin ( ~ )
3	Output Anode ( + )
4	Output Cathode ( - )

### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

### Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability

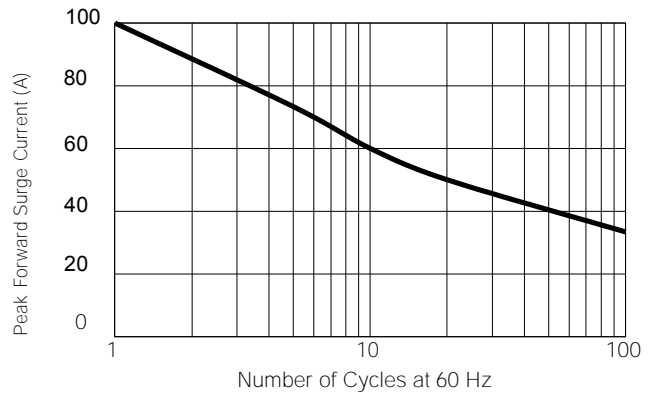
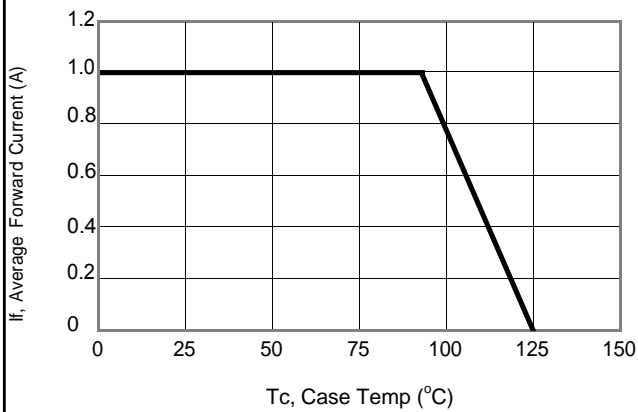
### Mechanical Data

- **Case:** MBF Molded plastic body over Schottky barrier chips
- **Terminals:** Solder plated, solderable per JESD22-B102
- **Polarity:** Polarity symbols marked on body

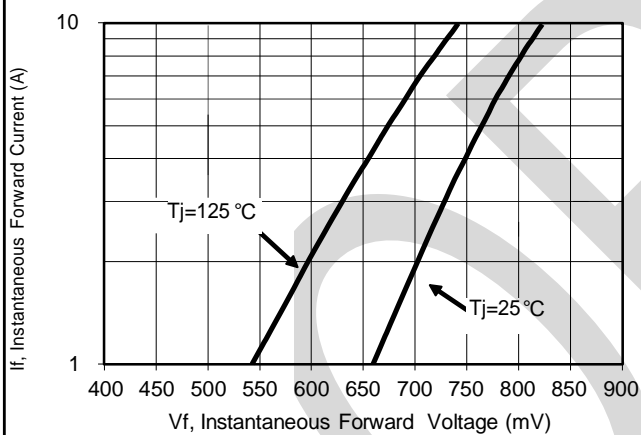
Items	Symbol	KMB16F	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	60	V
Maximum RMS voltage	$V_{RMS}$	42	V
Maximum DC blocking voltage	$V_{DC}$	60	V
Maximum average forward output rectified current at $T_A=30^{\circ}C$	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30	A
Thermal resistance from junction to ambient per leg <sup>(1)</sup>	$R_{\theta JA}$	85	$^{\circ}C/W$
Thermal resistance from junction to lead per leg <sup>(1)</sup>	$R_{\theta JL}$	20	$^{\circ}C/W$
Maximum Forward Voltage per leg at 1.0 A	$V_F$	0.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_j=25^{\circ}C$ $T_j=100^{\circ}C$	$I_R$	0.5 20	mA
Operating junction temperature range	$T_J$	-55 to +125	$^{\circ}C$
Storage temperature range	$T_{STG}$	-55 to +125	$^{\circ}C$

Note 1: Units mounted on P.C.B. with 0.5×0.5" (13×13mm) pads

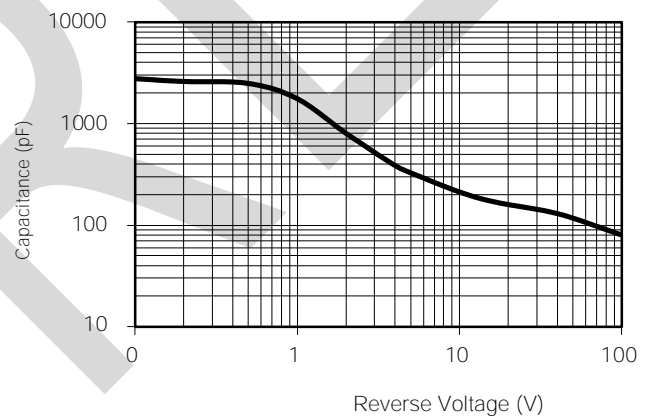
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



### Current Derating, Case



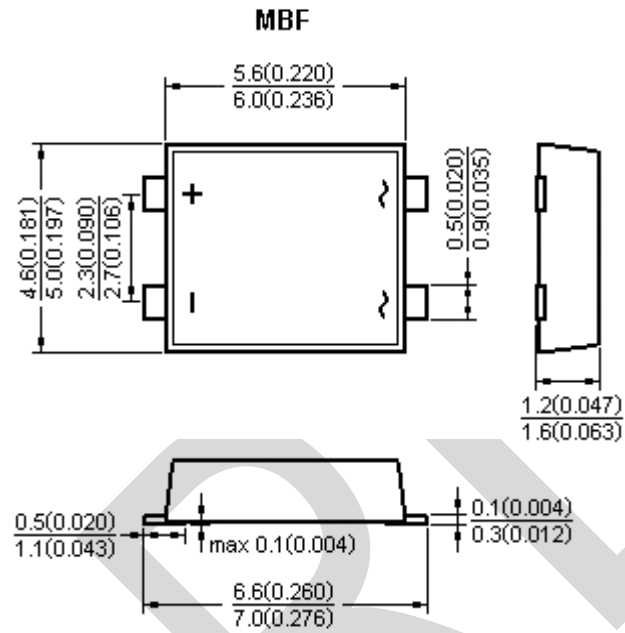
### Maximum Repetitive Surge Current



### Typical Forward Voltage

### Typical Junction Capacitance

## PACKAGE OUTLINE DIMENSIONS



Dimensions in millimeters and (inches)