

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

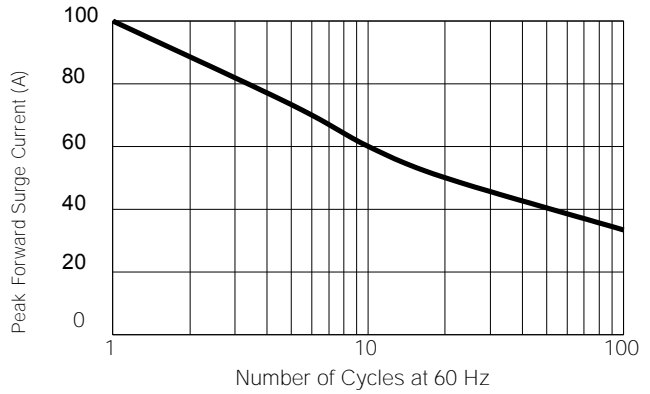
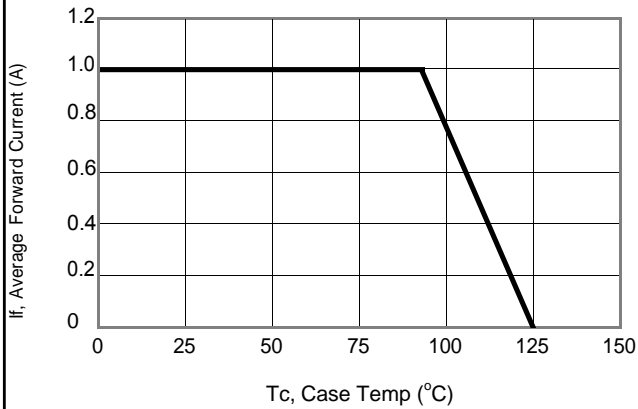
Mechanical Data

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

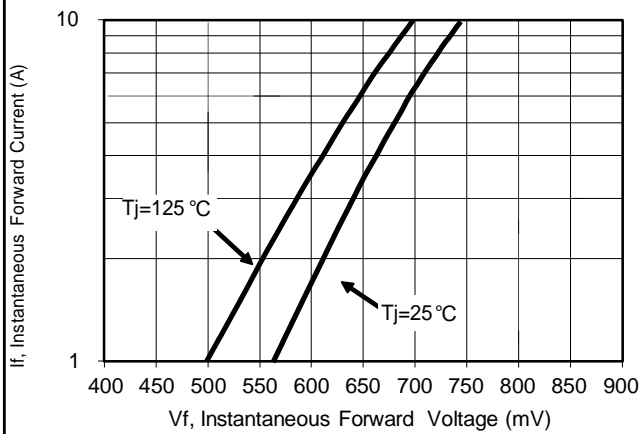
Items	Symbol	KMB14F	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC blocking voltage	V_{DC}	40	V
Maximum average forward output rectified current at $T_A=30^{\circ}C$	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30	A
Thermal resistance from junction to ambient per leg ⁽¹⁾	$R_{\theta JA}$	85	$^{\circ}C/W$
Thermal resistance from junction to lead per leg ⁽¹⁾	$R_{\theta JL}$	20	$^{\circ}C/W$
Maximum Forward Voltage per leg at 1.0 A	V_F	0.55	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_j=25^{\circ}C$ $T_j=100^{\circ}C$	I_R	0.3 10	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

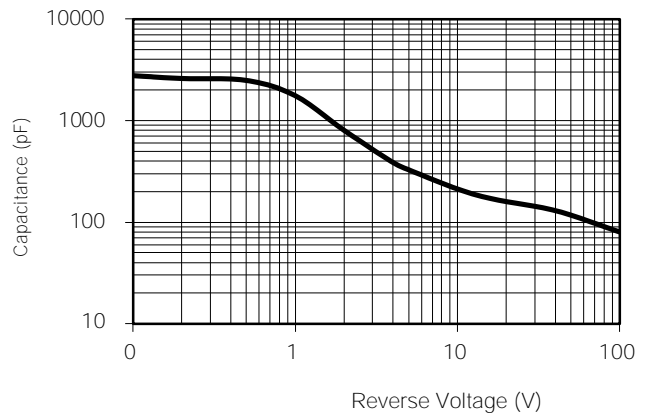
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



Current Derating, Case



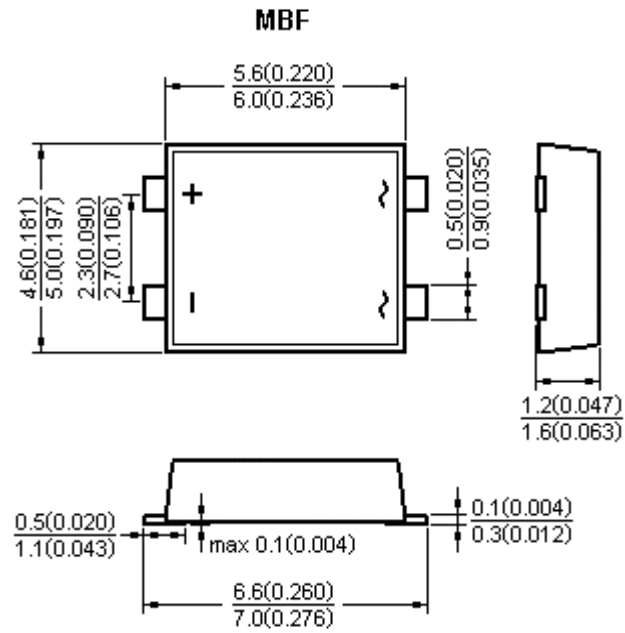
Maximum Repetitive Surge Current



Typical Forward Voltage

Typical Junction Capacitance

PACKAGE OUTLINE DIMENSIONS



Dimensions in millimeters and (inches)