



KMB22F-KMB210F

## Schottky Surface Mount Flat Bridge Rectifier

## Major Ratings and Characteristics

I <sub>F(AV)</sub>	2.0 A
V <sub>RRM</sub>	20 V to 100 V
I <sub>FSM</sub>	50 A
V <sub>F</sub>	0.50 V, 0.55V, 0.70 V, 0.85V
T <sub>j</sub> max.	125 °C

Patent Pending

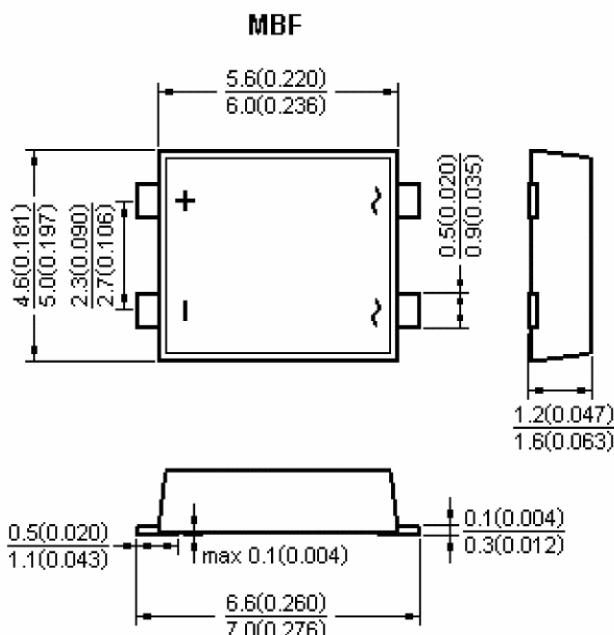


## Features

- 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
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

## Mechanical Data

- **Case:** MBF molded plastic body over Schottky barrier chips
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Polarity symbols marked on body



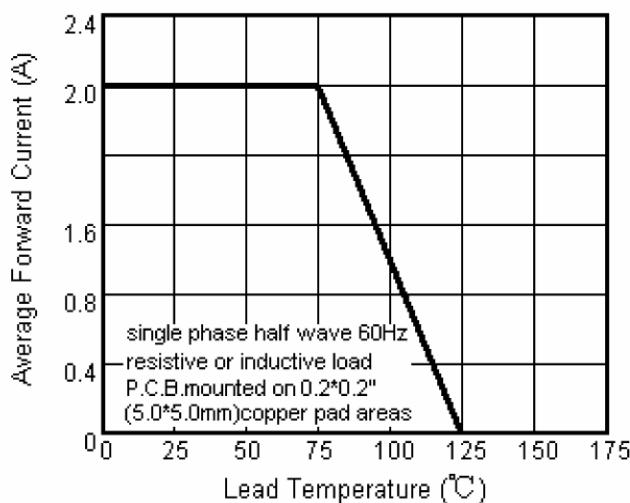
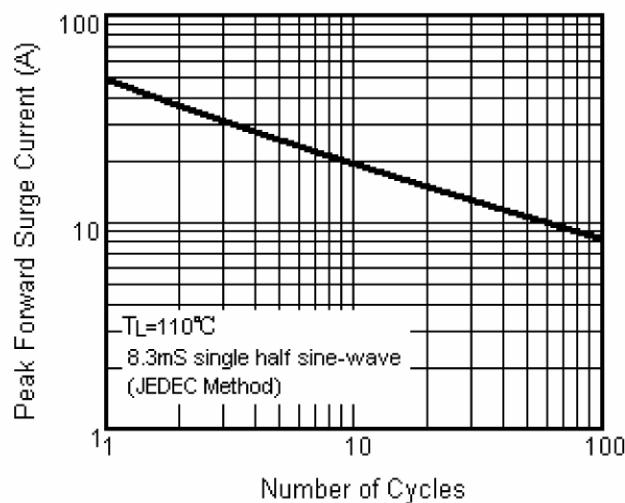
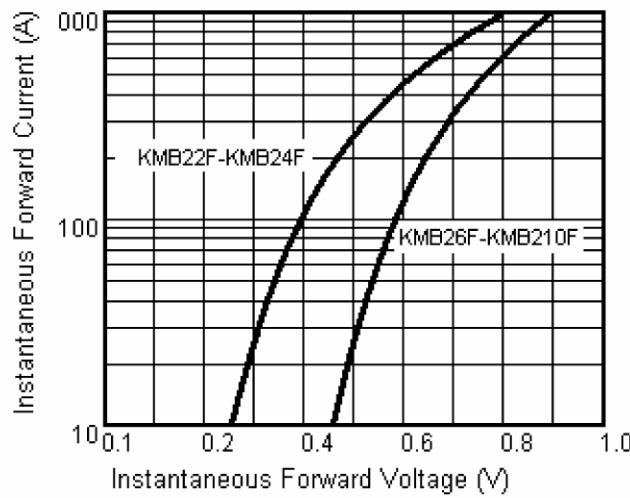
Dimensions in millimeters and (inches)

## Maximum Ratings &amp; Thermal Characteristics &amp; Electrical Characteristics

(T<sub>A</sub> = 25 °C unless otherwise noted)

	Symbol	KMB22F	KMB24F	KMB26F	KMB28F	KMB210F	UNIT		
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	40	60	80	100	V		
Maximum RMS voltage	V <sub>RMS</sub>	14	28	42	56	70	V		
Maximum DC blocking voltage	V <sub>DC</sub>	20	40	60	80	100	V		
Maximum average forward rectified current 0.2×0.2"(5.0×5.0mm)copper pad area	I <sub>F(AV)</sub>	2.0					A		
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50					A		
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	0.50	0.55	0.70	0.85		V		
Maximum DC reverse current T <sub>A</sub> = 25 °C at Rated DC blocking voltage T <sub>A</sub> = 100 °C	I <sub>R</sub>	0.5 20					mA		
Typical Junction Capacitance at 4.0V, 1.0MHz	C <sub>J</sub>	250			125		pF		
Typical Thermal resistance (Note1)	R <sub>θJA</sub> R <sub>θJL</sub>	85 20			°C/W				
Operating junction temperature range	T <sub>j</sub>	-55 to +125					°C		
Storage temperature range	T <sub>STG</sub>	-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.

**KMB22F-KMB210F****Schottky Surface Mount Flat Bridge Rectifier****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**