KMB22F-KMB210F Schottky Surface Mount Flat Bridge Rectifier

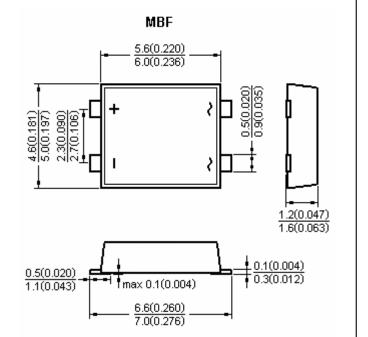


Features

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

Mechanical Date

- 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 & Thermal Characteristics & Electrical Characteristics

(T_A = 25 °C unless otherwise noted)

(I _A = 25 °C unless otherwise noted)			Ī	Ī	Ī	1	1
	Symbol	KMB22F	KMB24F	KMB26F	KMB28F	KMB210F	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)}	2.0					Α
Peak forward surge current 8.3 ms single half sinewave superimposed on rated load	I _{FSM}	50					Α
Maximum instantaneous forward voltage at 2.0A	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	CJ	250 125			pF		
Typical Thermal resistance (Note1)	$R_{ hetaJA}$ $R_{ hetaJL}$	85 20					°C/W
Operating junction temperature range	T _J	–55 to +125					$^{\circ}$
Storage temperature range	T _{STG}	– 55 to +150					$^{\circ}$

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.

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Characteristic Curves (T_A=25 ℃ unless otherwise noted)

Fig.1 Forward Current Derating Curve 2.4 Average Forward Current (A) 2.0 1.6 0.8 single phase half wave 60Hz resistive or inductive load P.C.B.mounted on 0.2*0.2" (5.0*5.0mm)copper pad areas 100 25 50 75 150 Lead Temperature (°C)

Fig.2 Maximum Non-Repetitive Peak
Forward Surge Current

100

TL=110°C

8.3mS single half sine-wave
(JEDEC Method)

Number of Cycles

Fig.3 Typical Instantaneours Forward Characteristics

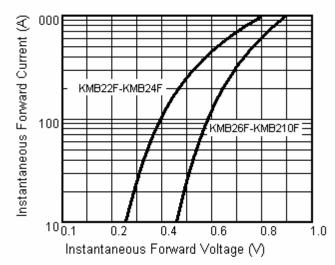


Fig.4A Typical Reverse Characteristics

