

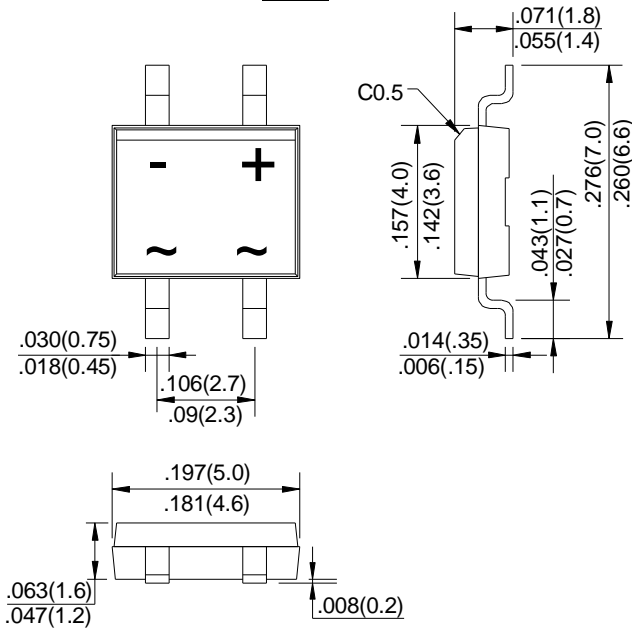


# KMB12F THRU KMB110F

## Schottky Surface Mount Flat Bridge Rectifier

Reverse Voltage - 20 to 100 Volts Forward Current - 1.0 Amperes

### MBF



Dimensions in inches and (millimeters)

### FEATURES

- Surge overload rating: 30 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Low leakage
- Reliable low cost construction utilizing molded

### MECHANICAL DATA

Case: Molded plastic, MBF

Epoxy: UL 94V-O rate flame retardant

Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed

Mounting position: Any

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

MDD Catalog Number	Symbol	KMB12F	KMB14F	KMB16F	KMB18F	KMB110F	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>	1.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30					A
Maximum instantaneous forward voltage at 1.0A	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>	85					°C/ W
	R <sub>θJL</sub>	20					
Operating junction temperature range	T <sub>J</sub>	−55 to +125					°C
Storage temperature range	T <sub>STG</sub>	− 55 to +150					°C

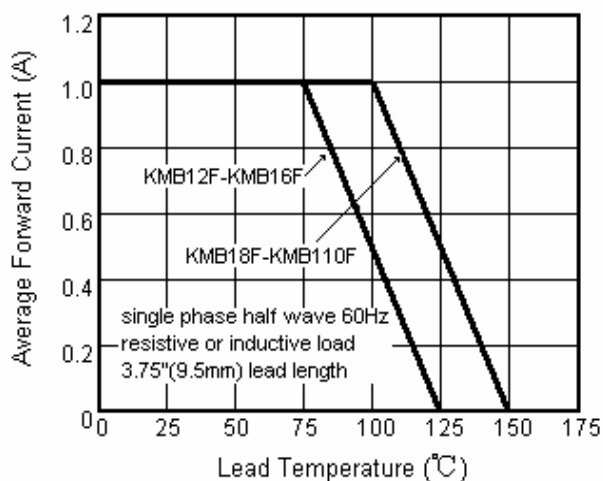
Note: 1. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2×0.2"(5.0×5.0mm)copper pad areas.



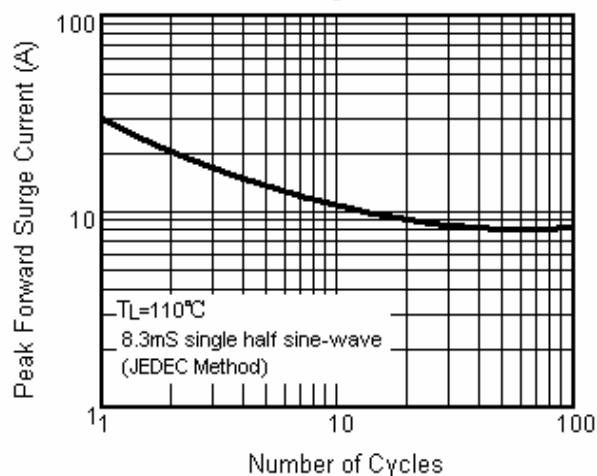
# RATINGS AND CHARACTERISTIC CURVES KMB12F THRU KMB110F

**Characteristic Curves** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

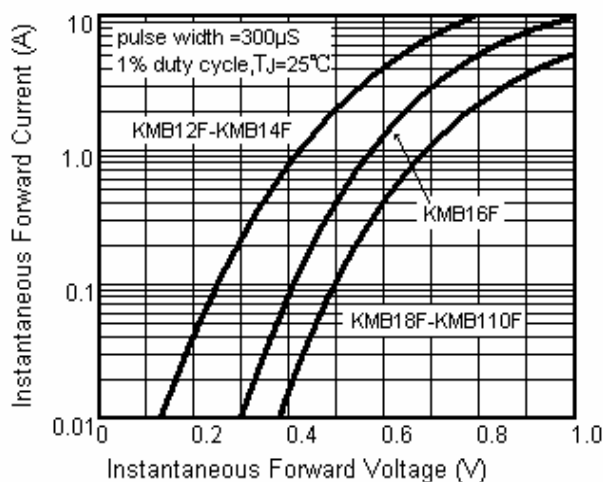
**Fig.1 Forward Current Derating Curve**



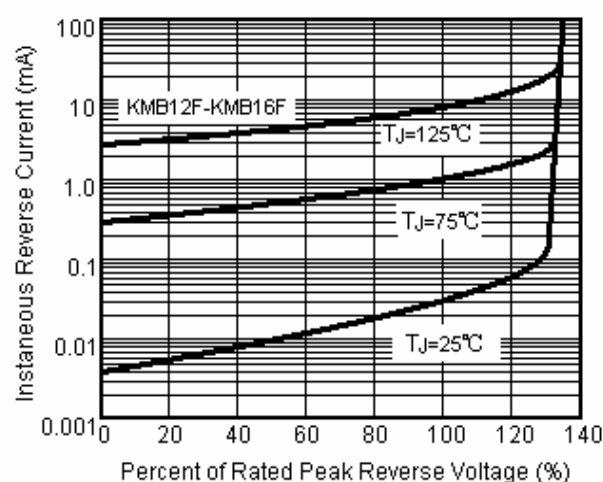
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



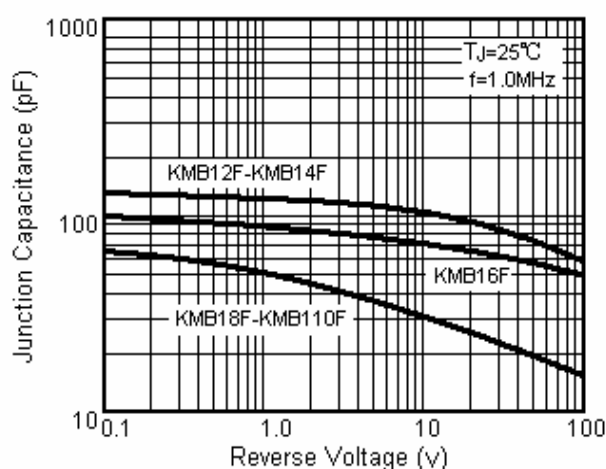
**Fig.3 Typical Instantaneous Forward Characteristics**



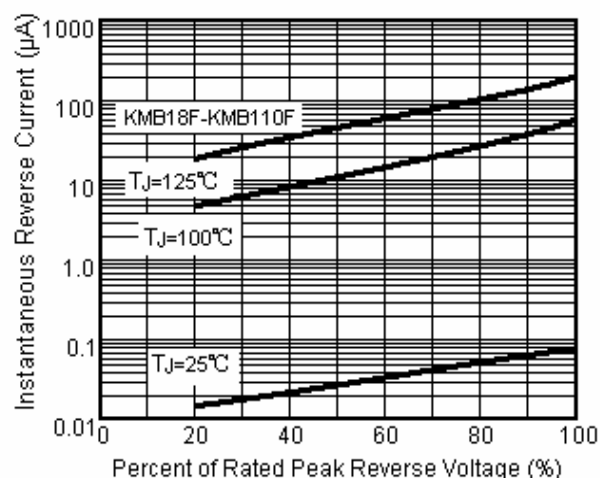
**Fig.4A Typical Reverse Characteristics**



**Fig.5 Typical Junction Capacitance**



**Fig.4B Typical Reverse Characteristics**



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考!)



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