

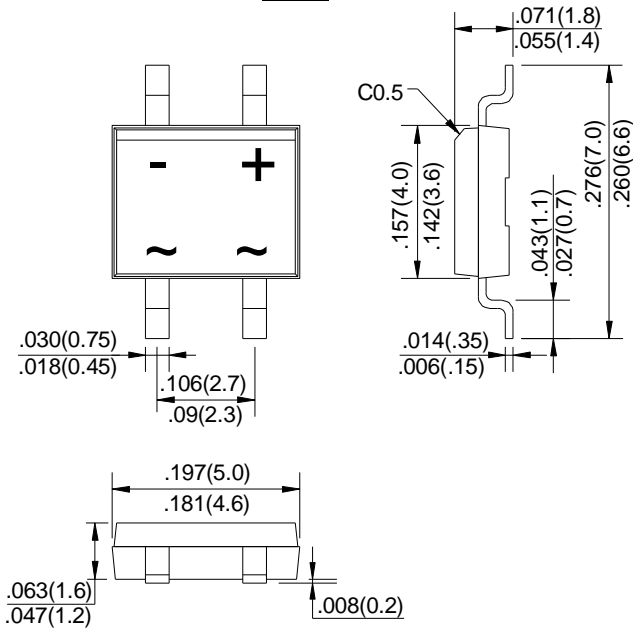


# KMB12F THRU KMB110F

## Schottky Surface Mount Flat Bridge Rectifier

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

### MBF



### 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%.

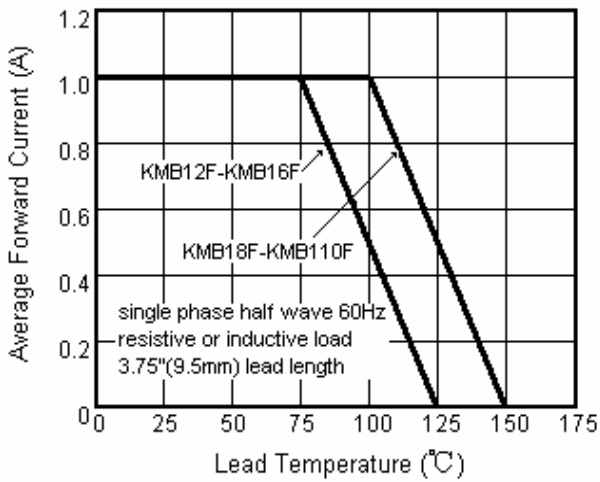
TWGMC Catalog Number	Symbol	KMB12F	KMB14F	KMB16F	KMB18F	KMB110F	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	40	60	80	100	V
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	V
Maximum DC blocking voltage	$V_{DC}$	20	40	60	80	100	V
Maximum average forward rectified current 0.2×0.2"(5.0×5.0mm)copper pad area	$I_{F(AV)}$	1.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	30					A
Maximum instantaneous forward voltage at 1.0A	$V_F$	0.50	0.55	0.70	0.85		V
Maximum DC reverse current at Rated DC blocking voltage	$I_R$	0.5 20					mA
Typical Junction Capacitance at 4.0V, 1.0MHz	$C_J$	250			125		pF
Typical Thermal resistance (Note1)	$R_{\theta JA}$ $R_{\theta JL}$	85 20					°C/W
Operating junction temperature range	$T_J$	-55 to +125					°C
Storage temperature range	$T_{STG}$	- 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.

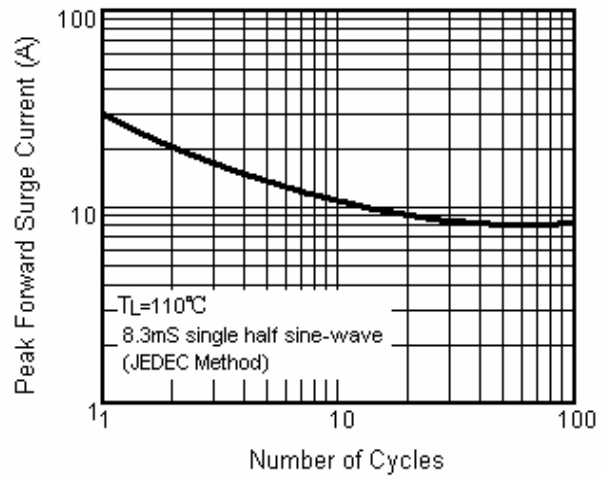
# RATINGS AND CHARACTERISTIC CURVES KMB12F THRU KMB110F

## Characteristic Curves ( $T_A=25$ unless otherwise noted)

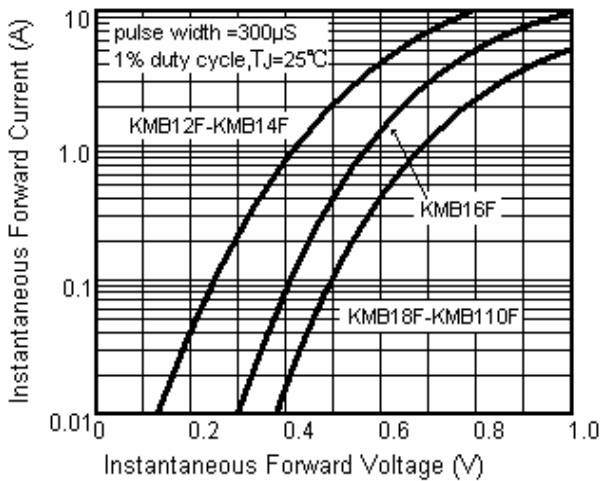
**Fig.1 Forward Current Derating Curve**



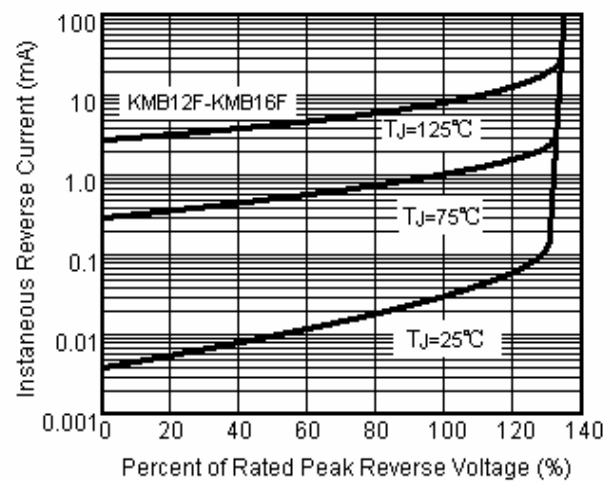
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



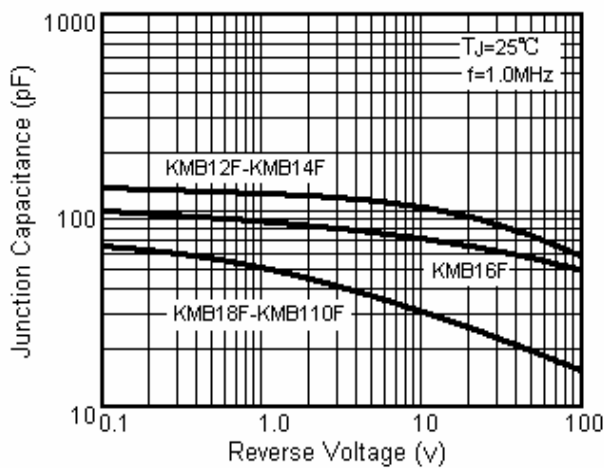
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4A Typical Reverse Characteristics**



**Fig.5 Typical Junction Capacitance**



**Fig.4B Typical Reverse Characteristics**

