

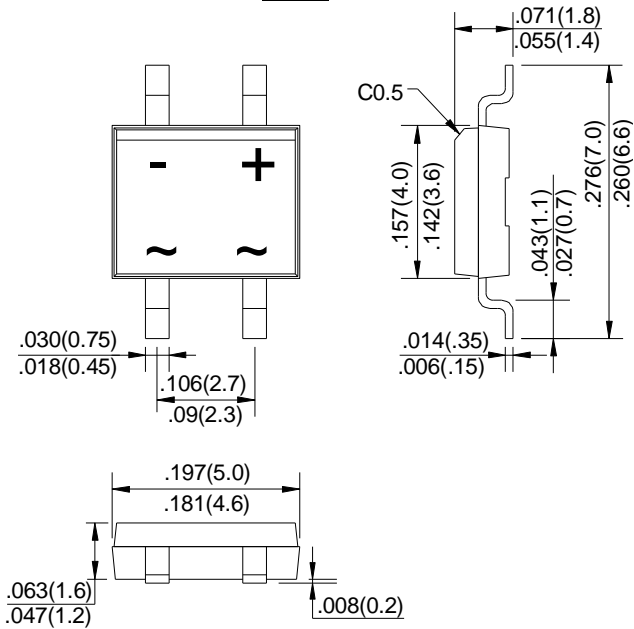


# KMB12F THRU KMB110F

## 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%.

MDD 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

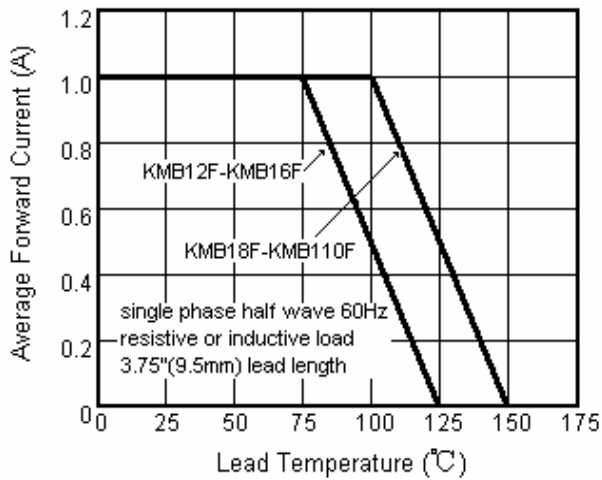


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

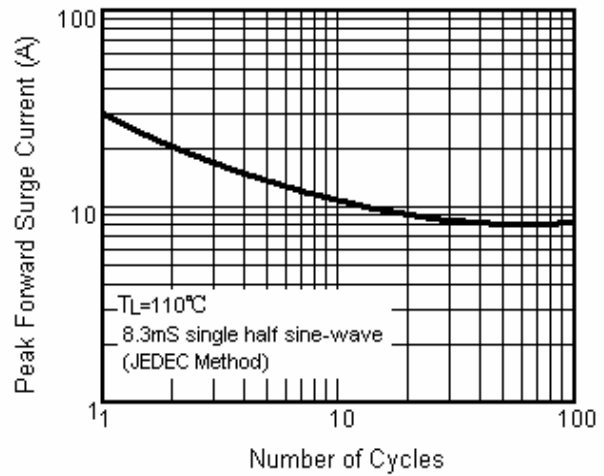


Fig.3 Typical Instantaneous Forward Characteristics

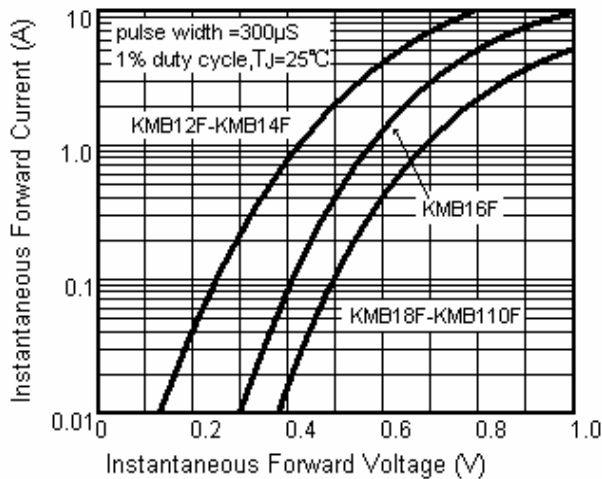


Fig.4A Typical Reverse Characteristics

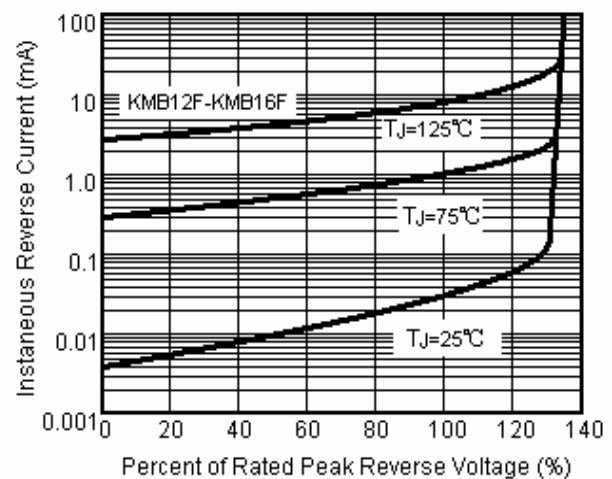


Fig.5 Typical Junction Capacitance

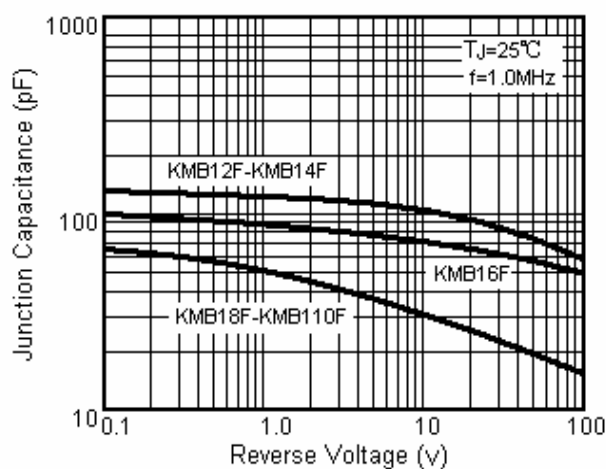
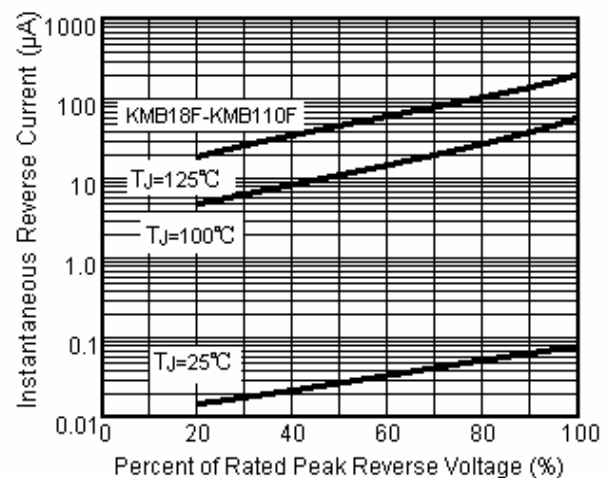


Fig.4B Typical Reverse Characteristics



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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