

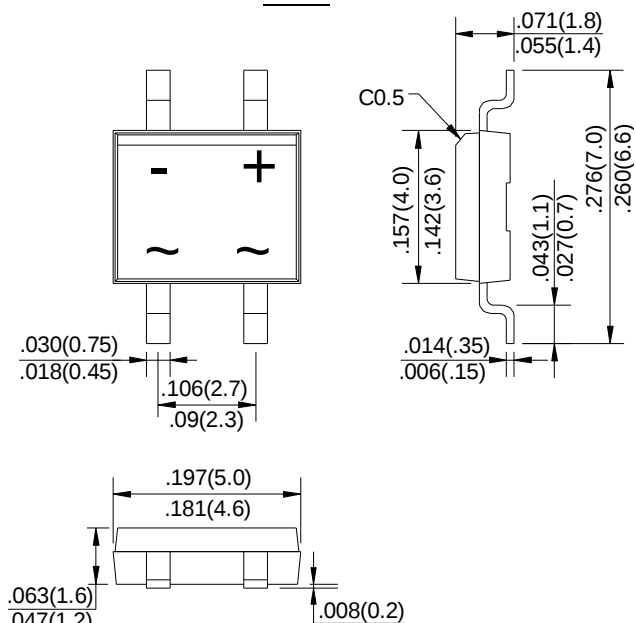


KMB12F THRU KMB110F

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 forwad voltage at 1.0A	V _F	0.50	0.55	0.70	0.85		V
Maximum DC reverse current T _A = 25 °C at Rated DC blocking voltage T _A = 100°C	I _R	0.5 20					mA
Typical Junction Capacitance at 4.0V,1.0MHz	C _J	250			125		pF
Typical Thermal resistance (Note1)	R _{θJA} R _{θJL}	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 ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

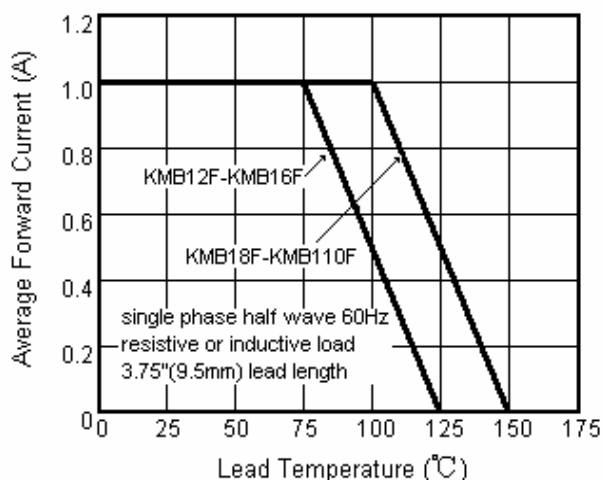


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

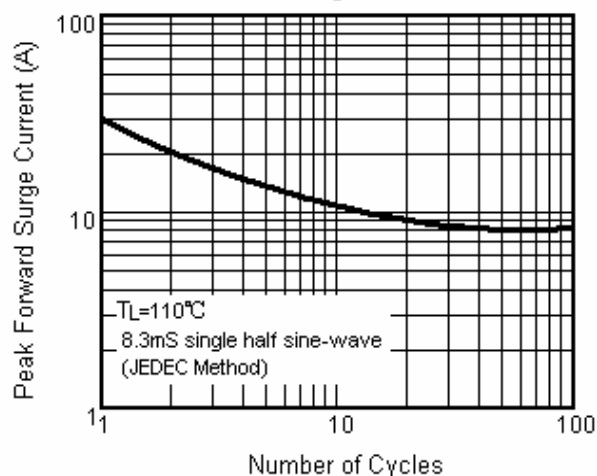


Fig.3 Typical Instantaneous Forward Characteristics

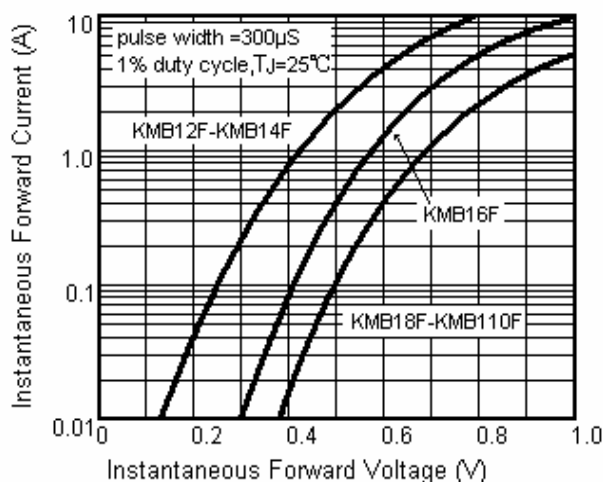


Fig.4A Typical Reverse Characteristics

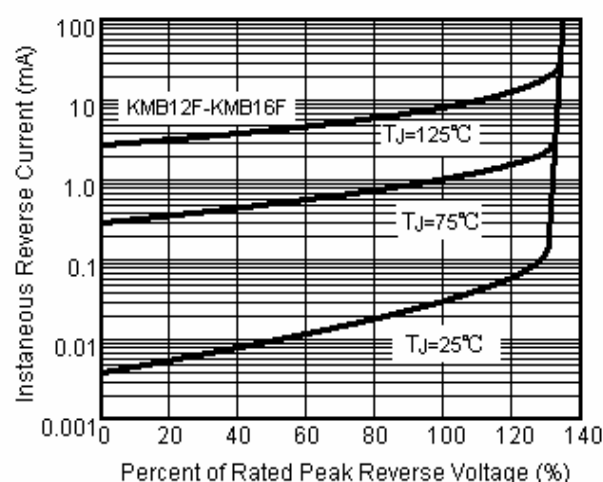


Fig.5 Typical Junction Capacitance

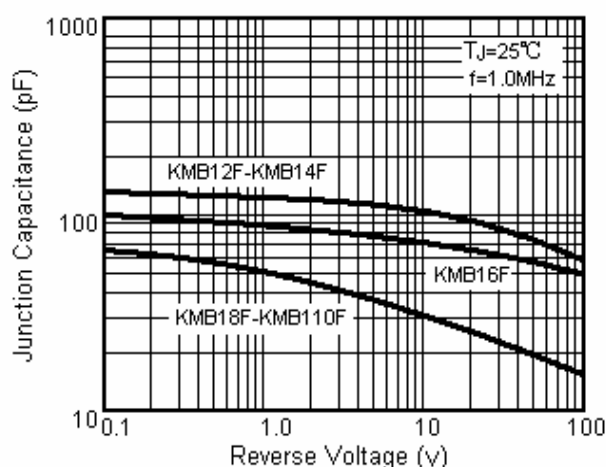


Fig.4B Typical Reverse Characteristics

