

VI. Bridge Rectifier

1.0A SMD Schottky Bridge Rectifiers (Low Profile Type) KMB12F~KMB110F

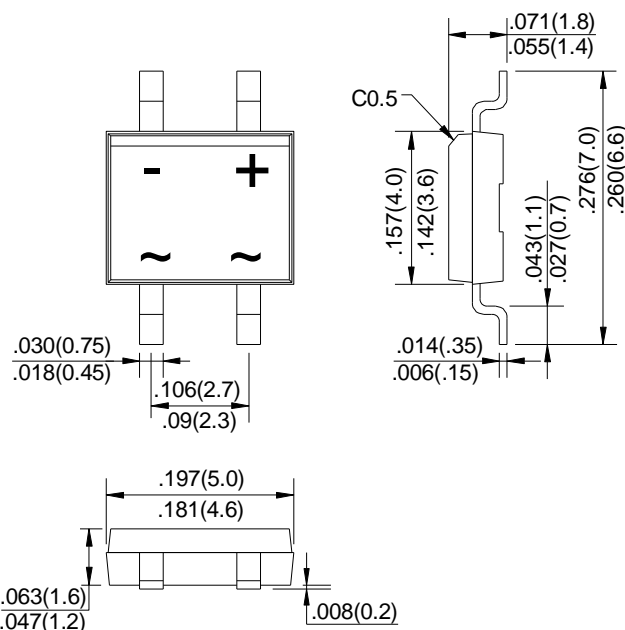
(Package: MTS)

FEATURES

- Reliable low cost construction utilizing molded plastic technique.
- Ultrafast reverse recovery time.
- High surge current capability.
- Saves space on printed circuit boards.
- High temperature soldering guaranteed: 260 / 10 seconds at terminals.

MECHANICAL DATA

- Case : Molded plastic body over schottky barrier chips.
- Terminals : Solder plated, solderable per J-STD-002B and JESD22-B102D.
- Polarity : Polarity symbols marked on case.
- Mounting position : Any.



Case: MTS
Dimensions in inches and (millimeters)

Ratings & Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified.

Characteristic	Symbol	KMB12F	KMB14F	KMB16F	KMB18F	KMB110F	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	Volts
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	Volts
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	Volts
Maximum average forward rectified current 0.2x0.2"(5.0x5.0mm) copper pad area	I_o	1.0					Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load.	I_{FSM}	30					Amps
Maximum instantaneous forward voltage at 1.0A	V_F	0.50	0.55	0.70	0.85		Volts
Maximum DC reverse current at @Ta = 25 rated DC blocking voltage @Ta = 100	I_R	0.5 20					mA
Typical junction capacitance (Note 1)	C_j	250			125		PF
Typical thermal resistance (Note 2)	Rth-JA Rth-JL	85 20					/W
Operating junction temperature range	T_j	-55 to +125					
Storage temperature range	T_{stg}	-55 to +150					

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4.0 volts D.C.
2. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

<http://patron-components.com/>

Ratings and Characteristic Curves of KMB12F~KMB110F

Fig.1 Forward Current Derating Curve

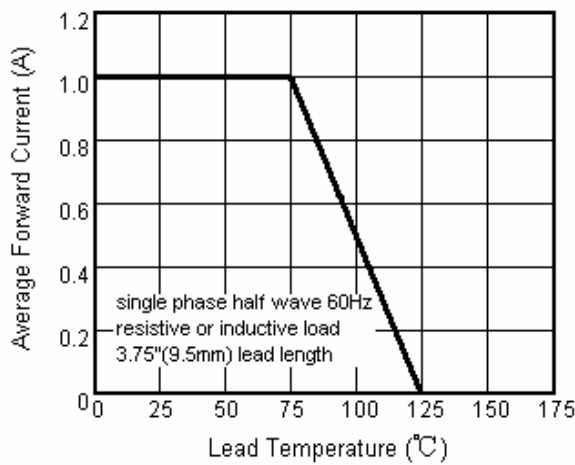


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

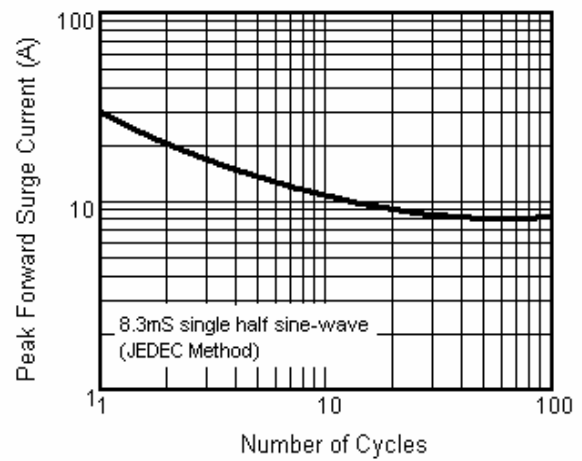


Fig.3 Typical Instantaneous Forward Characteristics

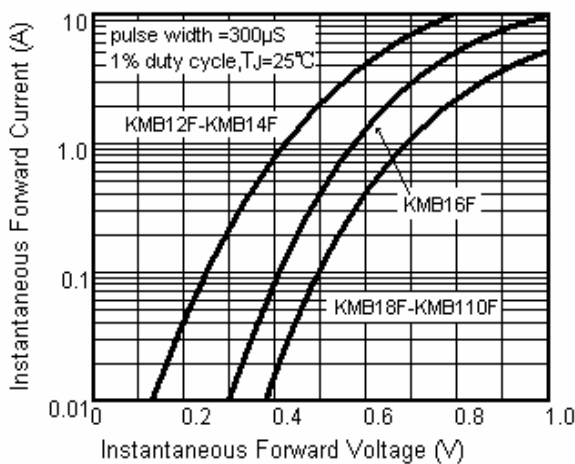


Fig.4A Typical Reverse Characteristics

