

VI. Bridge Rectifier

2.0A SMD Schottky Bridge Rectifiers (Low Profile Type) KMB22F~KMB210F

(Package: MTS)

<p>FEATURES</p> <ul style="list-style-type: none"> • 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. <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • 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. 	<p>Case: MTS Dimensions in inches and (millimeters)</p>
---	---

Ratings & Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified.

Characteristic	Symbol	KMB22F	KMB24F	KMB26F	KMB28F	KMB210F	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	2.0					Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load.	I_{FSM}	50					Amps
Maximum instantaneous forward voltage at 2.0A	V_F	0.50	0.55	0.70	0.85		Volts
Maximum DC reverse current at rated DC blocking voltage	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.

Ratings and Characteristic Curves of KMB22F~KMB210F

Fig.1 Forward Current Derating Curve

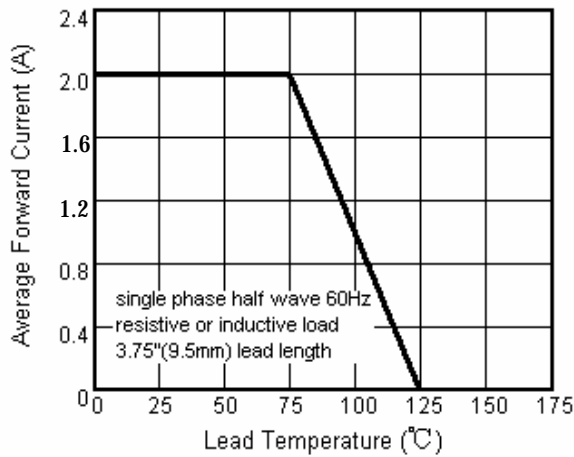


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

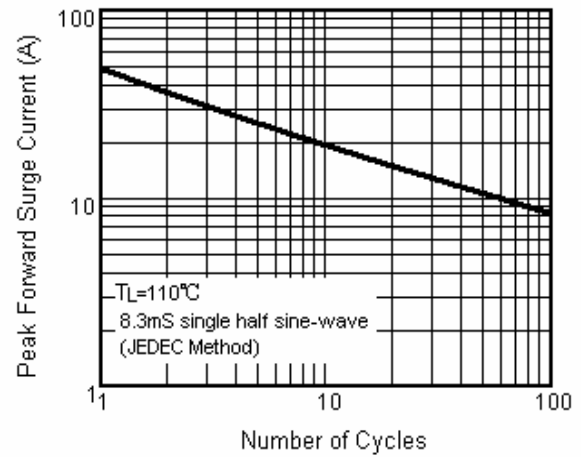


Fig.3 Typical Instantaneous Forward Characteristics

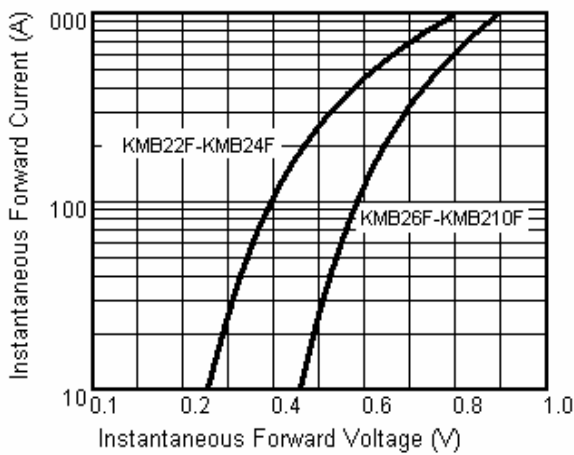


Fig.4A Typical Reverse Characteristics

