

CURRENT 1.0 Ampere  
 VOLTAGE RANG 20 to 100 Volts

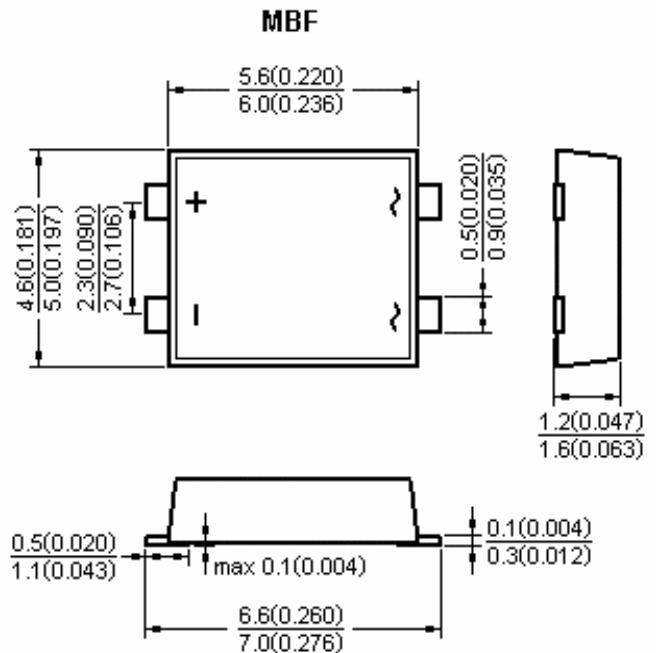
## KMB14F THRU KMB110F

### Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

### Mechanical Date

- Case:** MBF molded plastic body over Schottky barrier chips
- Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- Polarity:** Polarity symbols marked on body



Dimensions in millimeters and (inches)

### Maximum Ratings & Thermal Characteristics & Electrical Characteristics

( $T_A = 25^\circ\text{C}$  unless otherwise noted)

	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 $T_A = 25^\circ\text{C}$ at Rated DC blocking voltage $T_A = 100^\circ\text{C}$	$I_R$	0.5 20					mA
Typical Junction Capacitance at 4.0V, 1.0MHz	$C_J$	250			125		pF
Typical Thermal resistance (Note1)	$R_{\theta JA}$ $R_{\theta JL}$	85 20					$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-55 to +125					$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 to +150					$^\circ\text{C}$

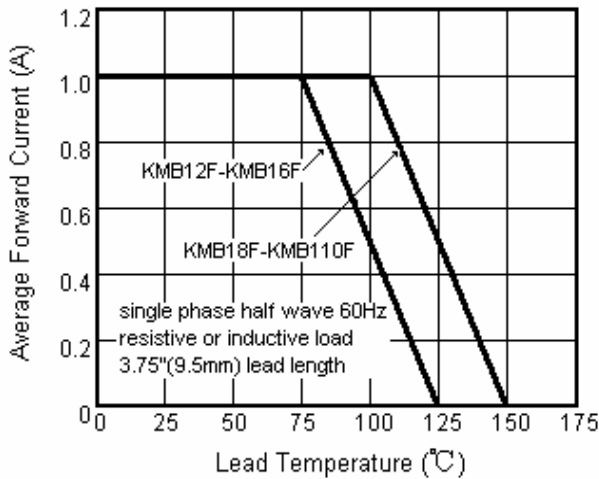
Note: 1. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2×0.2"(5.0×5.0mm)copper pad areas.

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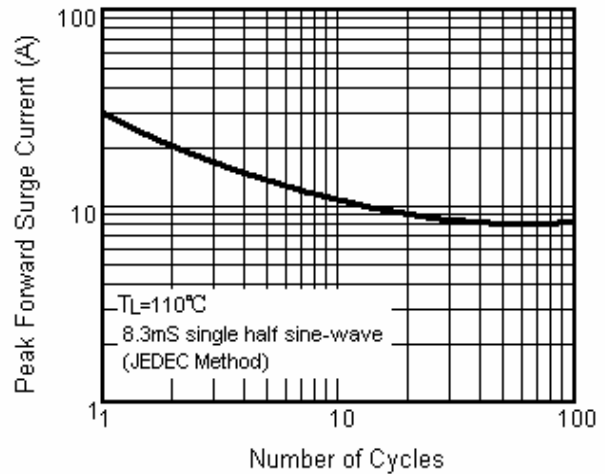
**KMB14F THRU KMB110F**

**Rating and Characteristic Curves** (TA=25°C Unless otherwise noted)

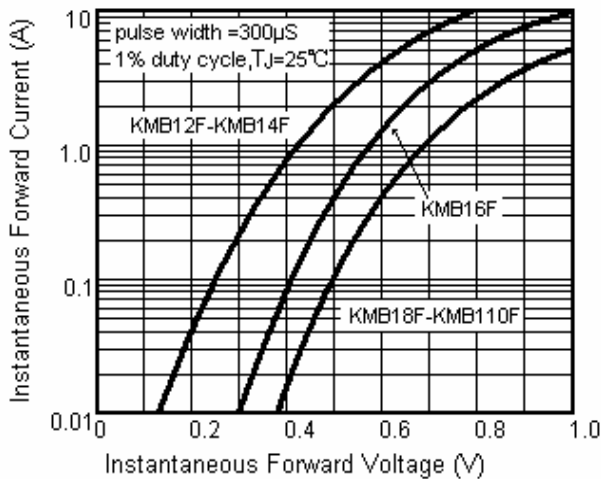
**Fig.1 Forward Current Derating Curve**



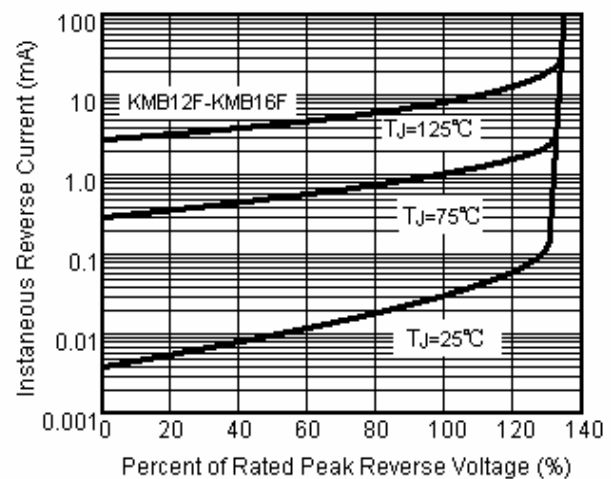
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



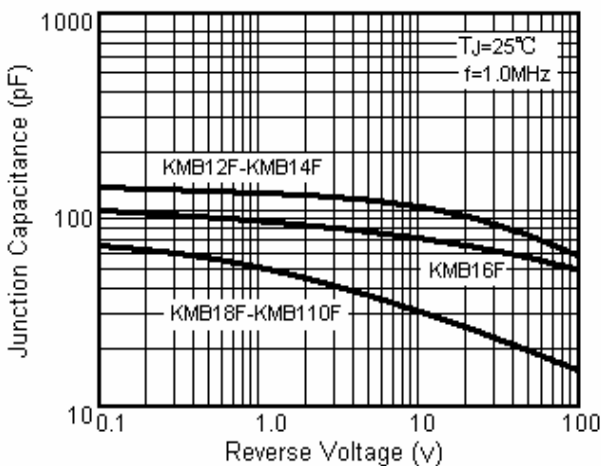
**Fig.3 Typical Instantaneous Forward Characteristics**



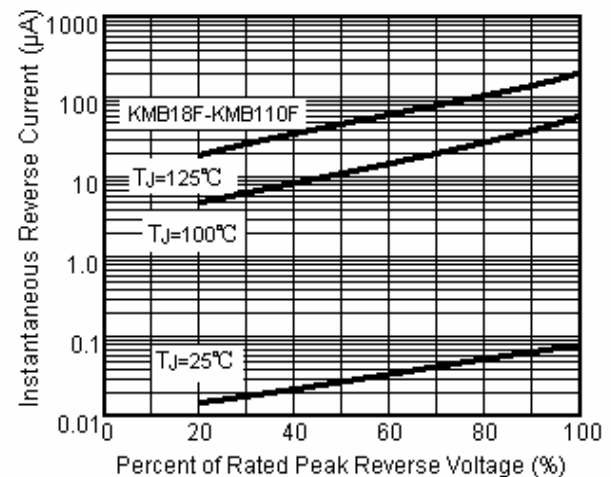
**Fig.4A Typical Reverse Characteristics**



**Fig.5 Typical Junction Capacitance**



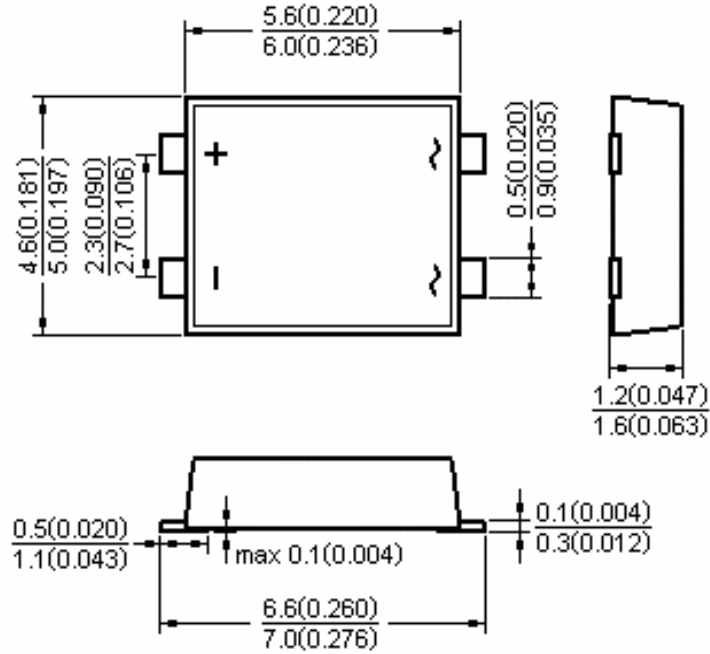
**Fig.4B Typical Reverse Characteristics**



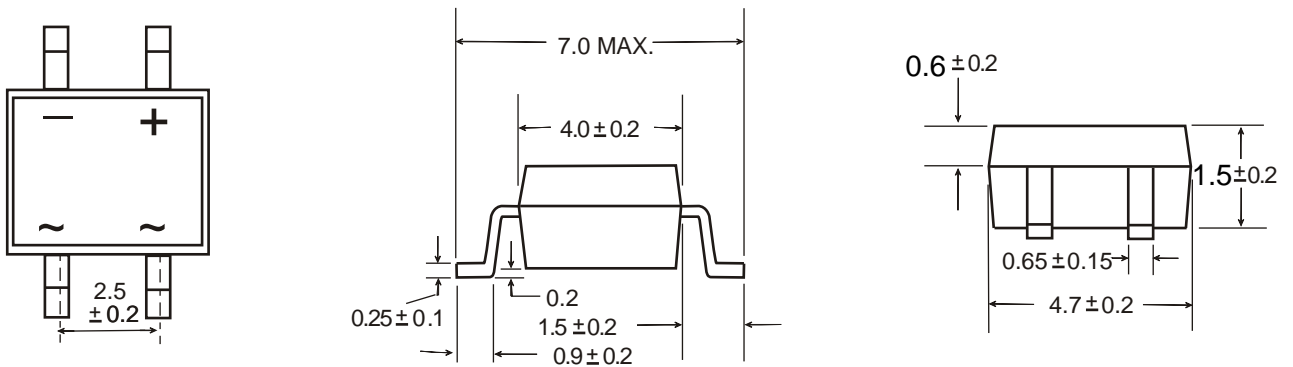
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Usbam mould



The body mold



Dimensions in millimeters(1mm =0.0394")