



## MB05F THRU MB10F

## SCHOTTKY BRIDGE

### 0.8A SCHOTTKY BRIDGE RECTIFIER

#### DESCRIPTION

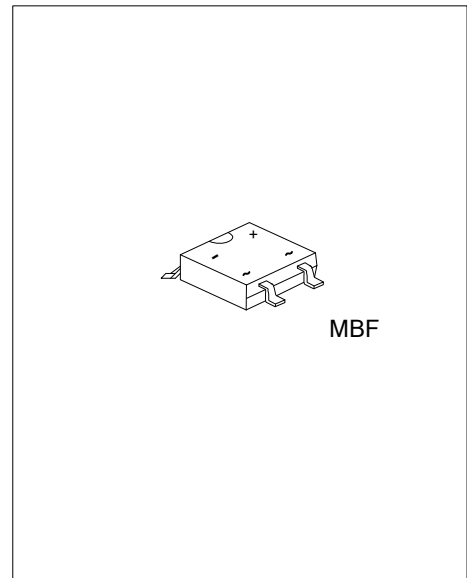
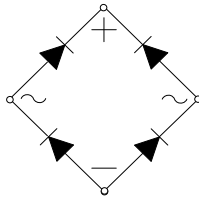
The UTC **MB05F THRU MB10F** is a schottky bridge rectifiers, it uses UTC's advanced technology to provide customers with high surge current capability, etc.

The UTC **MB05F THRU MB10F** is suitable for General purpose use in ac-to-dc bridge full wave rectification for LED bulb and telecommunication.

#### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High surge current capability
- \* Designed for surface mount application

#### SYMBOL



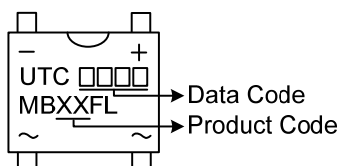
MBF

#### ORDERING INFORMATION

Ordering Number	Package	Packing
MB05FL-MBF-R	MBF	Tape Reel
MB1FL-MBF-R	MBF	Tape Reel
MB2FL-MBF-R	MBF	Tape Reel
MB4FL-MBF-R	MBF	Tape Reel
MB6FL-MBF-R	MBF	Tape Reel
MB10FL-MBF-R	MBF	Tape Reel

<p>MB05FL-MBF-R</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Green Package</p>	<p>(1) R: Tape Reel</p> <p>(2) MBF: MBF</p> <p>(3) L: Lead Free</p>
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#### MARKING



# MB05F THRU MB10F

## SCHOTTKY BRIDGE

### ■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

Single phase, half wave, 60Hz, resistive or inductive load. For capacitance load, derate current by 20%.

PARAMETER	SYMBOL	RATINGS							UNIT
		MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current	$T_A=40^{\circ}\text{C}$ (Note 2)	0.5							A
	$T_A=40^{\circ}\text{C}$ (Note 3)	0.8							A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30							A
Operating Junction Temperature Range	$T_J$	-55~+150							$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-55~+150							$^{\circ}\text{C}$

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

2. Mounted on glass epoxy pc board with  $1.3\text{mm}^2$  solder pad.

3. Mounted on aluminum substrate PC board with  $1.3\text{mm}^2$  solder pad.

4. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

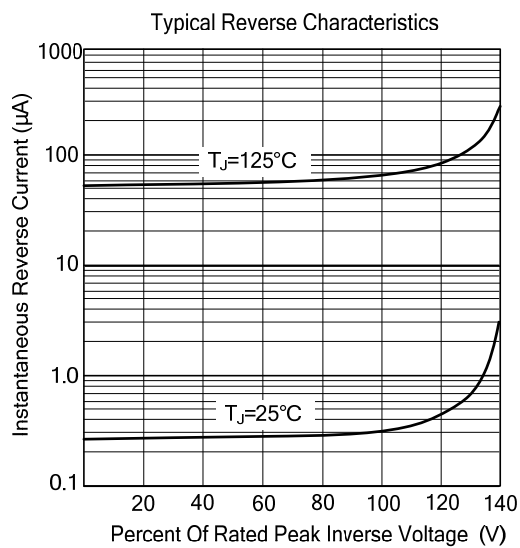
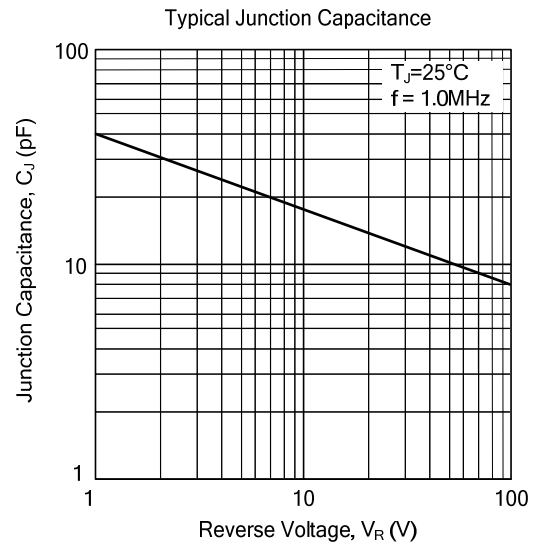
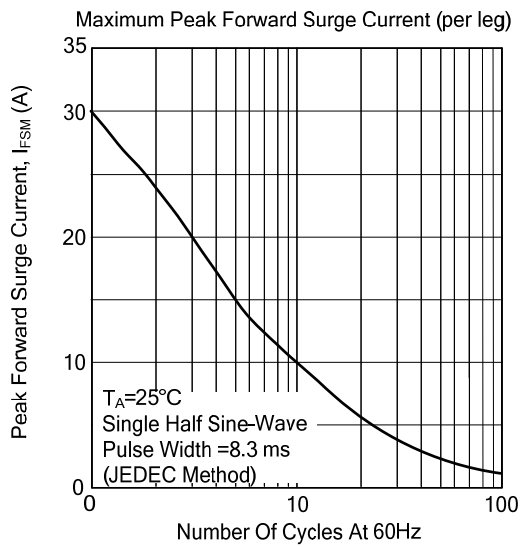
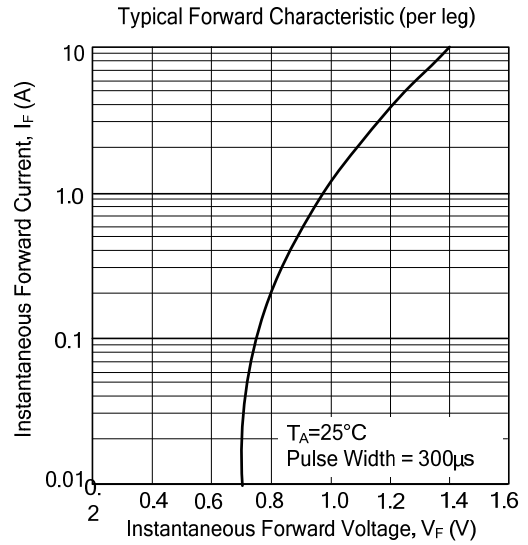
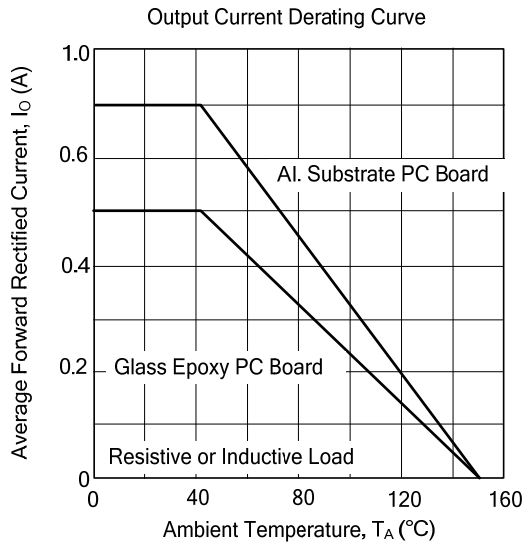
### ■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 4)	$\theta_{JA}$	60	$^{\circ}\text{C}/\text{W}$

### ■ ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	$V_F$	$I_F=0.8\text{A}$			1.1	V
DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_J=25^{\circ}\text{C}$			5.0	$\mu\text{A}$
		$T_J=125^{\circ}\text{C}$			500	$\mu\text{A}$
Typical Junction Capacitance (Note 4)	$C_J$			13		pF

## TYPICAL CHARACTERISTICS



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.