



## MB05FU THRU MB10FU

## SCHOTTKY BRIDGE

### 1.0A SCHOTTKY BRIDGE RECTIFIER

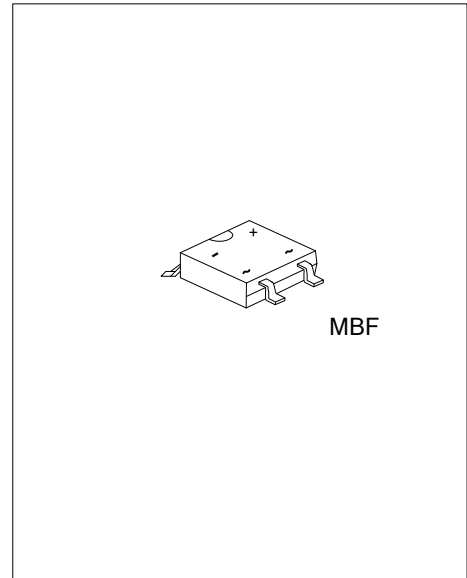
#### DESCRIPTION

The UTC **MB05FU THRU MB10FU** is a schottky bridge rectifiers, it uses UTC's advanced technology to provide customers with low forward voltage drop and high current capability, etc.

The UTC **MB05FU THRU MB10FU** is suitable for surface mount application.

#### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High surge current capability
- \* Designed for Surface Mount Application

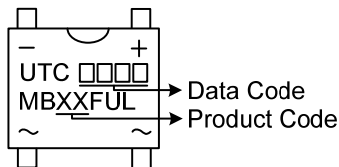


#### ORDERING INFORMATION

Ordering Number	Package	Packing
MB05FUL-MBF-R	MBF	Tape Reel
MB1FUL-MBF-R	MBF	Tape Reel
MB2FUL-MBF-R	MBF	Tape Reel
MB4FUL-MBF-R	MBF	Tape Reel
MB6FUL-MBF-R	MBF	Tape Reel
MB8FUL-MBF-R	MBF	Tape Reel
MB10FUL-MBF-R	MBF	Tape Reel

<p>MB05FUL-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



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### ■ 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
		MB05FU	MB1FU	MB2FU	MB4FU	MB6FU	MB8FU	MB10FU	
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 Forward Rectified Current	$T_A=40^{\circ}\text{C}$ $I_o$	1.0							A
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	35							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 1.3mm<sup>2</sup> solder pad.  
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
4. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.5×0.5"(13×13mm)copper pads.

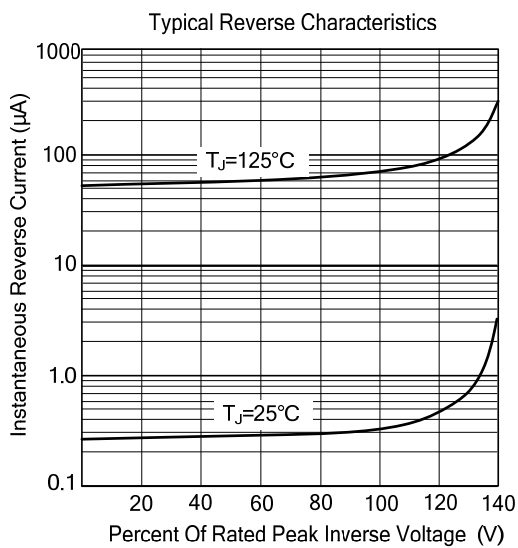
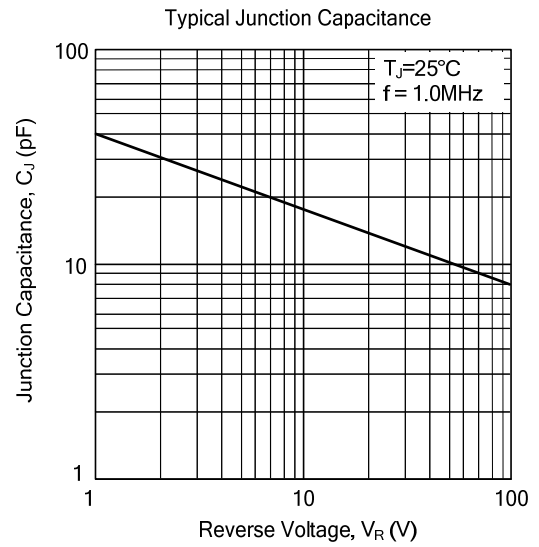
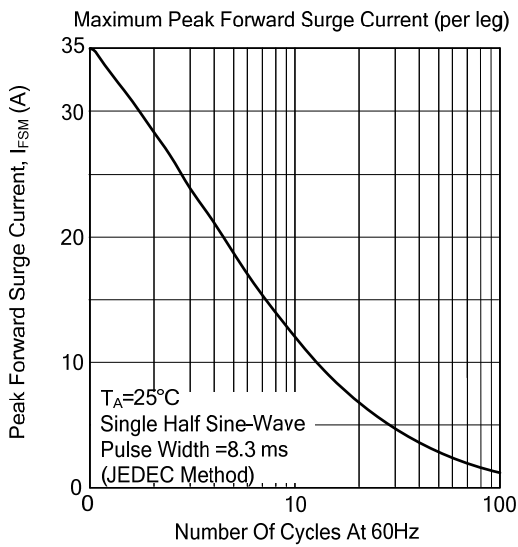
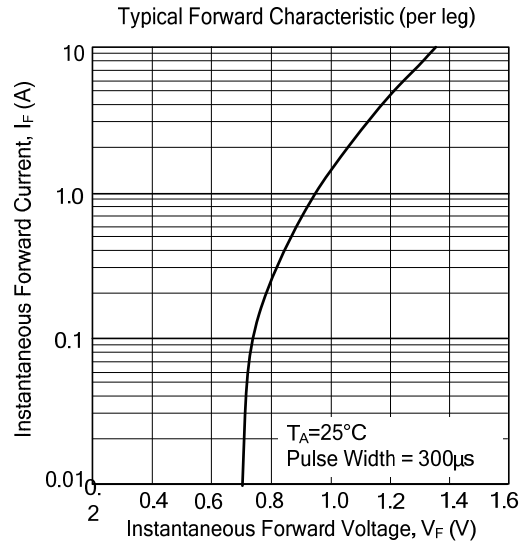
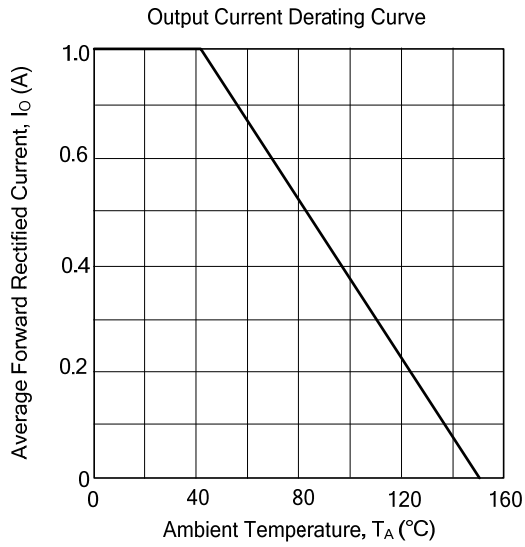
### ■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 3)	$\theta_{JA}$	60	$^{\circ}\text{C}/\text{W}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	$V_F$	$I_F=1.0\text{A}$			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 3)	$C_J$			25		pF

## TYPICAL CHARACTERISTICS



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