## MB05S THRU MB10S

### SCHOTTKY BRIDGE

# 0.8A SCHOTTKY BRIDGE RECTIFIER

#### **■** DESCRIPTION

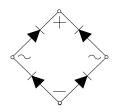
The UTC MB05S THRU MB10S is a schottky bridge rectifiers, it uses UTC's advanced technology to provide customers with high surge current capability, etc.

The UTC MB05S THRU MB10S is suitable for surface mount application.

#### ■ FEATURES

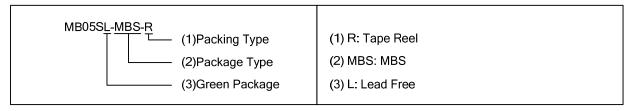
- \* Low leakage
- \* Surge overload rating-30A peak
- \* Designed for Surface Mount Application

#### ■ SYMBOL

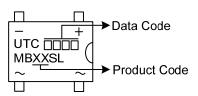


#### ORDERING INFORMATION

Ordering Number	Package	Packing
MB05SL-MBS-R	MBS	Tape Reel
MB1SL-MBS-R	MBS	Tape Reel
MB2SL-MBS-R	MBS	Tape Reel
MB4SL-MBS-R	MBS	Tape Reel
MB6SL-MBS-R	MBS	Tape Reel
MB8SL-MBS-R	MBS	Tape Reel
MB10SL-MBS-R	MBS	Tape Reel



#### ■ MARKING



MBS

#### ■ **ABSOLUTE MAXIMUM RATINGS** (T<sub>A</sub>=25°C, unless otherwise specified)

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%.

PARAMETER		SYMBOL	RATINGS						LINIT	
			MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNIT
Peak Repetitive Rev	verse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reve	rse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	Э	$V_{DC}$	50	100	200	400	600	800	1000	V
RMS Reverse Volta	ge	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified	T <sub>A</sub> =40°C (Note 2)		0.5							Α
Output Current	T <sub>A</sub> =40°C (Note 3)	l <sub>o</sub>	0.8						Α	
Non-Repetitive Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC										
		I <sub>FSM</sub>	30							Α
Operating Junction Temperature		-55~+150						°C		
Range		IJ	-55~+150							
Storage Temperatur	e Range	T <sub>STG</sub>	-55~+150			°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. Mounted on aluminum substrate PC board with 1.3mm<sup>2</sup> solder pad.

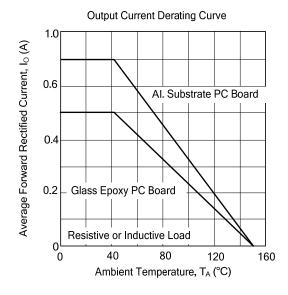
#### **■ THERMAL DATA**

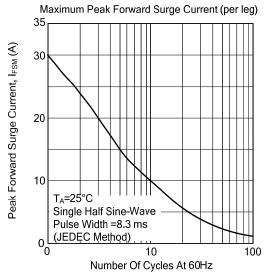
PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	$\theta_{JA}$	70	°C/W

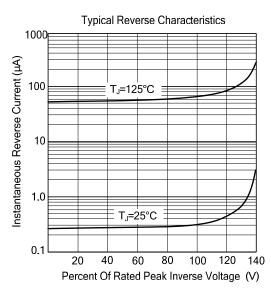
Note: Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

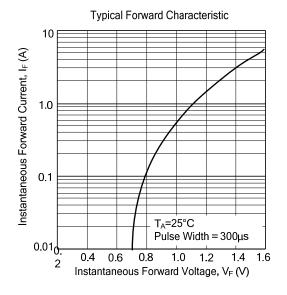
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	$V_{F}$	I <sub>F</sub> =0.8A			1.1	V
DC Reverse Current at Rated DC Blocking	-	T <sub>J</sub> =25°C			5.0	μΑ
Voltage	IR	T <sub>J</sub> =125°C			500	μΑ
Typical Junction Capacitance	CJ			13		pF

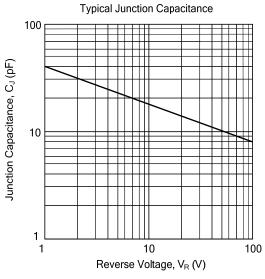
#### **■ TYPICAL CHARACTERISTICS**











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