



**DC COMPONENTS CO., LTD.**  
RECTIFIER SPECIALISTS

AB05S  
TB05S  
THRU  
AB10S  
TB10S

**TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED BRIDGE RECTIFIER**  
**VOLTAGE RANGE - 50 to 1000 Volts**      **CURRENT - 1.0 Ampere**

**FEATURES**

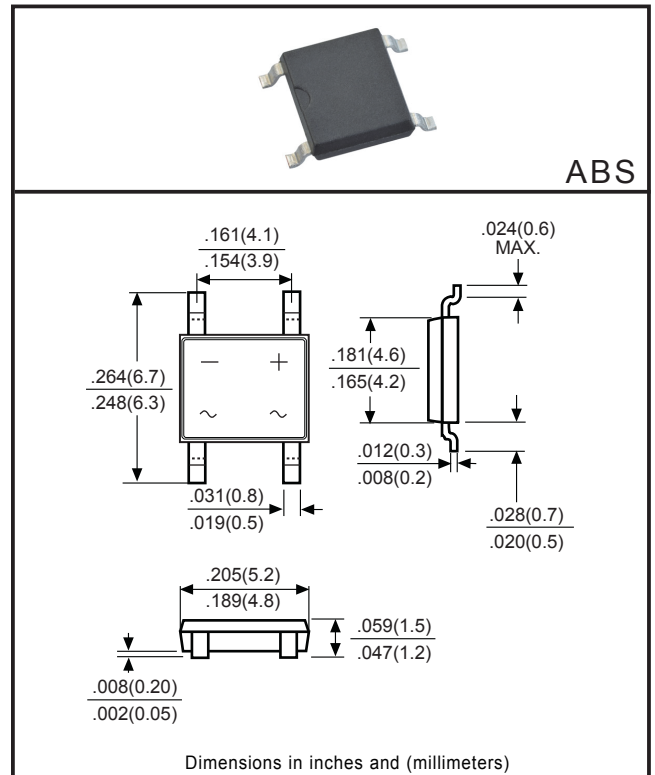
- \* Ideal for automatic placement
- \* High surge forward current capability
- \* Glass passivated junction
- \* Low forward voltage drop

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94-V0 rated flame retardant
- \* Lead: MIL-STD-202E, Method 208 guaranteed
- \* Polarity: Symbols molded or marked on body
- \* Mounting position: Any
- \* Weight: 0.20 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



		TB05S	TB1S	TB2S	TB4S	TB6S	TB8S	TB10S	
SYMBOL		AB05S	AB1S	AB2S	AB4S	AB6S	AB8S	AB10S	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> = 40°C	I <sub>O</sub>	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T <sub>J</sub> = 25°C	10							μAmps
	@T <sub>J</sub> = 125°C	100							
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	3.7							A <sup>2</sup> s
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	80							°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150							°C

NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

# RATING AND CHARACTERISTIC CURVES ( AB05S THRU AB10S ) TB05S THRU TB10S )

FIG. 1  
TYPICAL FORWARD CURRENT  
DERATING CURVE

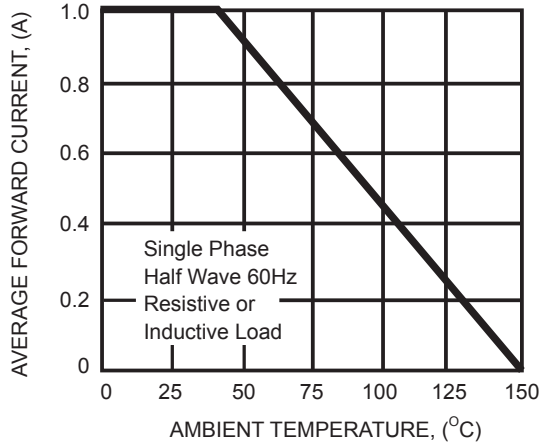


FIG. 2  
MAXIMUM NON-REPETITIVE FORWARD  
SURGE CURRENT

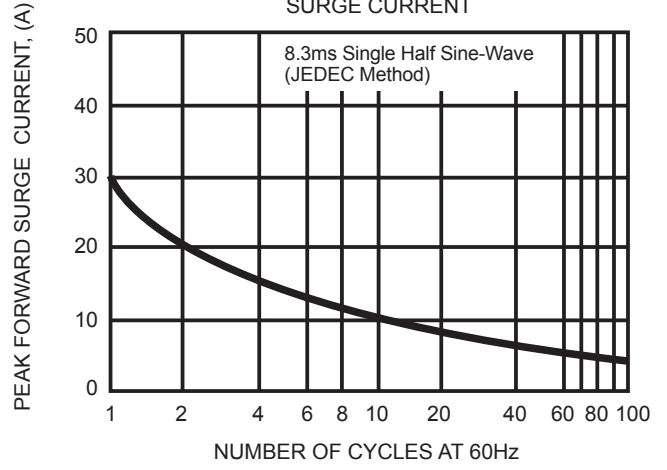


FIG. 3  
TYPICAL INSTANTANEOUS  
FORWARD CHARACTERISTICS

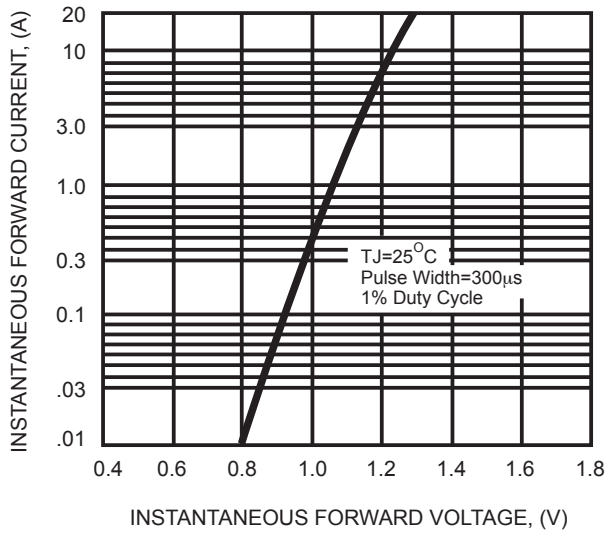
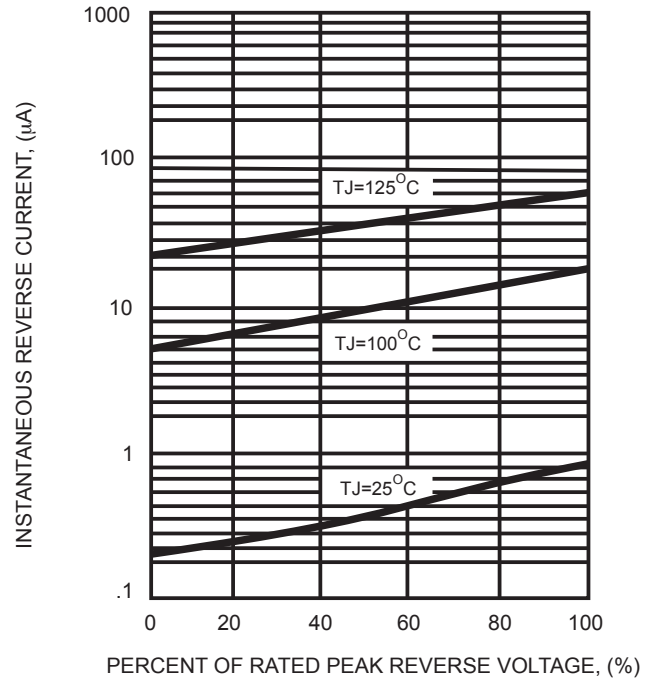


FIG. 4  
TYPICAL REVERSE CHARACTERISTICS



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