



# SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

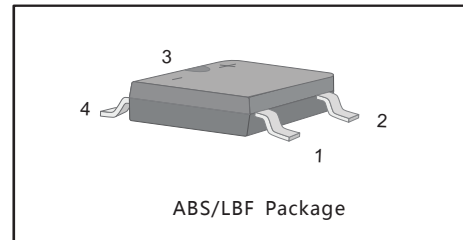
## TB1S - TB10S

VOLTAGE RANGE - 100 to 1000 V  
CURRENT - 0.8 A

### FEATURES

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 0.8 A
- High Surge Current Capability
- Designed for Surface Mount Application

PIN	DESCRIPTION
1	Input Pin ( ~ )
2	Input Pin ( ~ )
3	Output Anode ( + )
4	Output Cathode ( - )



### MECHANICAL DATA

- Case: ABS/LBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 88mg 0.0029oz

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbols	TB1S	TB2S	TB4S	TB6S	TB8S	TB10S	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Average Rectified Output Current at Ta = 40 °C	$I_O$	0.8						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30						A
Forward Voltage per element @ $I_F=0.4A$ @ $I_F=0.8A$	$V_F$	1.0 1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A=25\text{ }^\circ\text{C}$ @ $T_A=100\text{ }^\circ\text{C}$ @ $T_A=125\text{ }^\circ\text{C}$	$I_R$	5.0 100 500						$\mu\text{A}$
Typical Junction Capacitance ( Note1 )	$C_j$	13						pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$ $R_{\theta JL}$	80 16						$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150						$^\circ\text{C}$

- Note:** 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.  
2. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> copper pad.



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## RATING AND CHARACTERISTIC CURVES TB1S - TB10S

Fig.1 Average Rectified Output Current Derating Curve

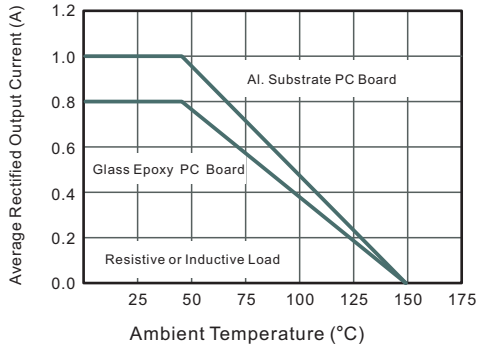


Fig.2 Typical Reverse Characteristics

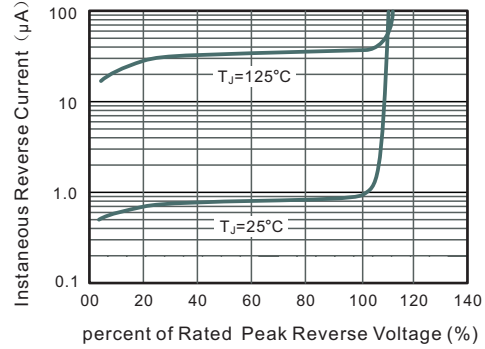


Fig.3 Typical Instantaneous Forward Characteristics

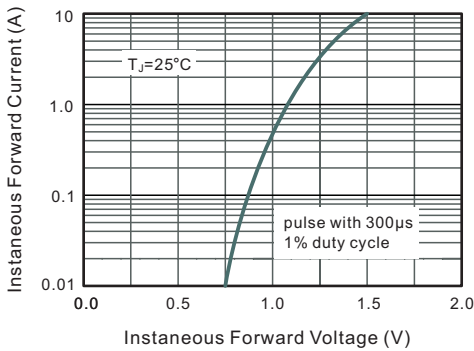


Fig.4 Typical Junction Capacitance

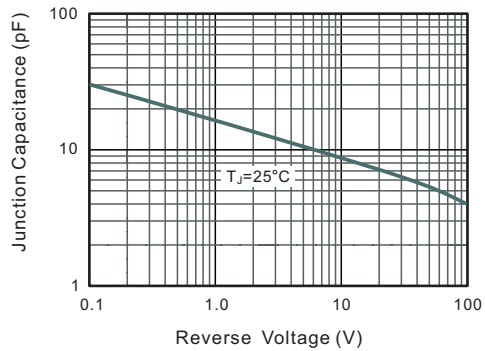
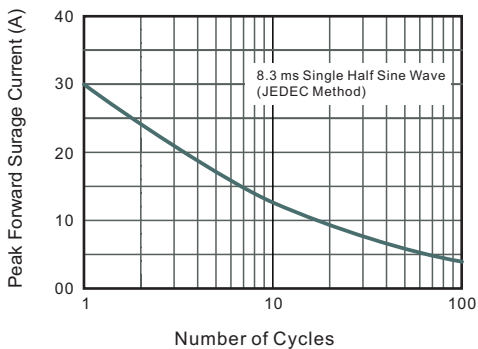


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





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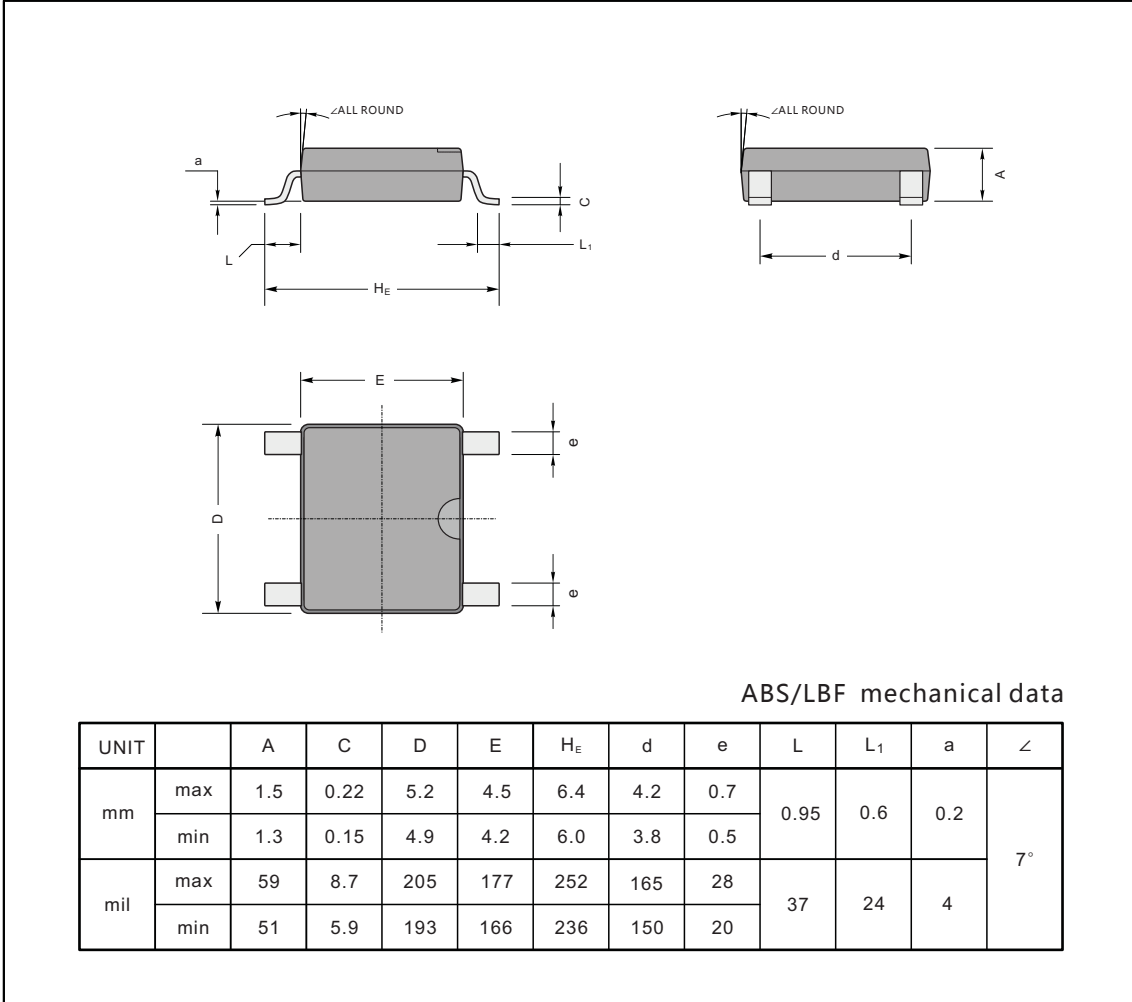
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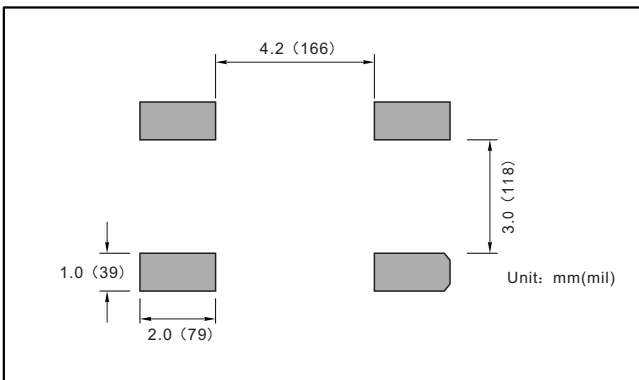
## PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ABS/LBF



## The recommended mounting pad size



## Marking

Type number	Marking code
TB1S	TB1S
TB2S	TB2S
TB4S	TB4S
TB6S	TB6S
TB8S	TB8S
TB10S	TB10S