

# TB2S-TB10S

Silicon Bridge Rectifiers

**Reverse Voltage: 200 - 1000V**

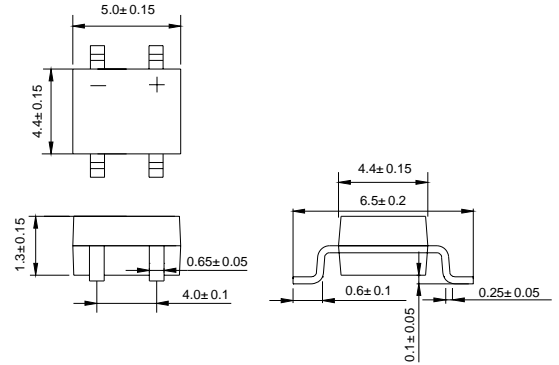
**Forward Current: 0.8,1.0A**



## TBS

### Features

- ✧ This series is UL recognized under Component Index, file number E239431
- ✧ Glass passivated chip junction
- ✧ Plastic material has U/L flammability classification 94v-O
- ✧ High surge overload rating: 30A peak
- ✧ Save space on printed circuit boards
- ✧ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. (2.3 kg) tension



Dimensions in millimeters

### Mechanical Data

- ✧ **Case:** Molded plastic body over passivated junctions
- ✧ **Terminals:** Plated leads solderable per MIL-STD-750, Method 2026
- ✧ **Polarity:** Polarity symbols marked on body  
Dimensions in inches and (millimeters)
- ✧ **Mounting Position:** Any
- ✧ **Weight:**

### 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 by 20%.

Parameter	Symbol	TB2S	TB4S	TB6S	TB8S	TB10S	UNITS
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RWS</sub>	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	800	1000	V
Maximum average forward output current T <sub>L</sub> =100°C	I <sub>F(AV)</sub>	0.8 <sup>1)</sup> 1.0 <sup>2)</sup>					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	30					A
Maximum instantaneous forward voltage at 0.4A	V <sub>F</sub>	0.95					V
Maximum reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage	I <sub>R</sub>	10					μA
Typical thermal resistance junction to lead On aluminum substrate	R <sub>θJL</sub>	25					°C/W
On glass-epoxy substrate	R <sub>θJA</sub>	62.5 80					
Operating junction temperature range	T <sub>J</sub>	-55---+150					°C
Storage temperature range	T <sub>STG</sub>	-55---+150					°C

NOTES: 1). On glass epoxy P.C.B.

2). On aluminum substrate

## Ratings AND Characteristic Curves

FIG.1 TYPICAL FORWARD CHARACTERISTICS

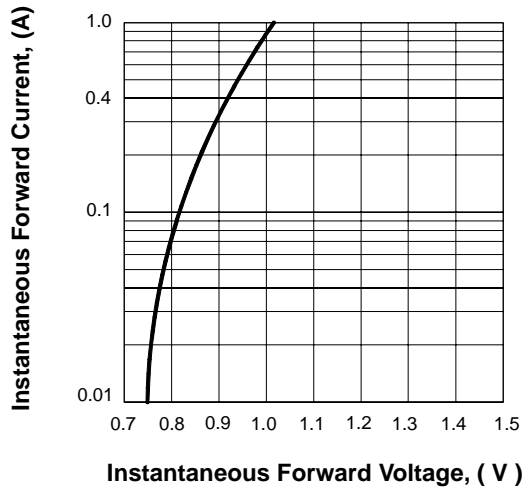


FIG.2 FORWARD DERATING CURVE

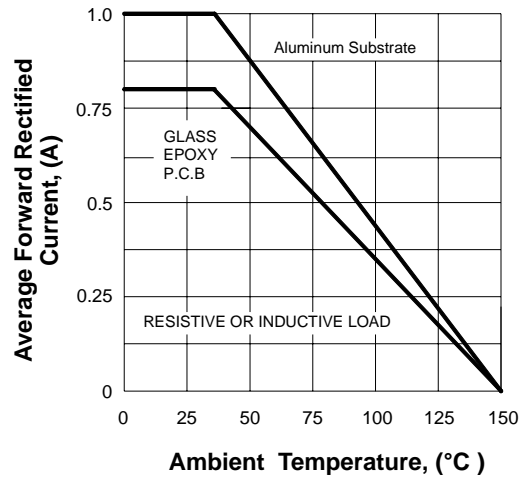


FIG.3 TYPICAL REVERSE CHARACTERISTICS

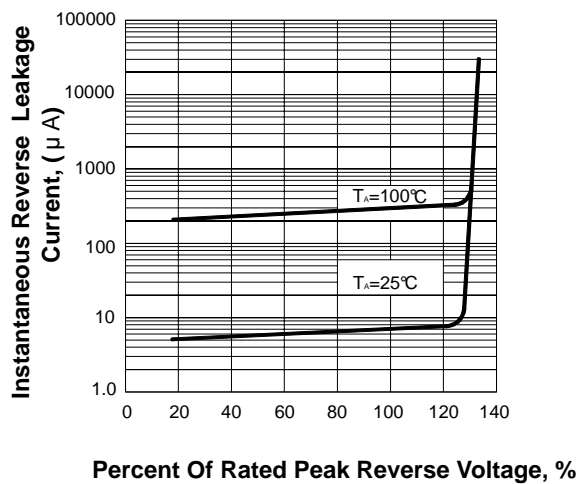


FIG.4 PEAK FORWARD SURGE CURRENT

