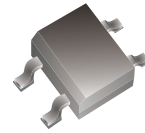


TB2S-G Thru. TB10S-G

Reverse Voltage: 200 to 1000 Volts

Forward Current: 0.8, 1.0 A

RoHS Device

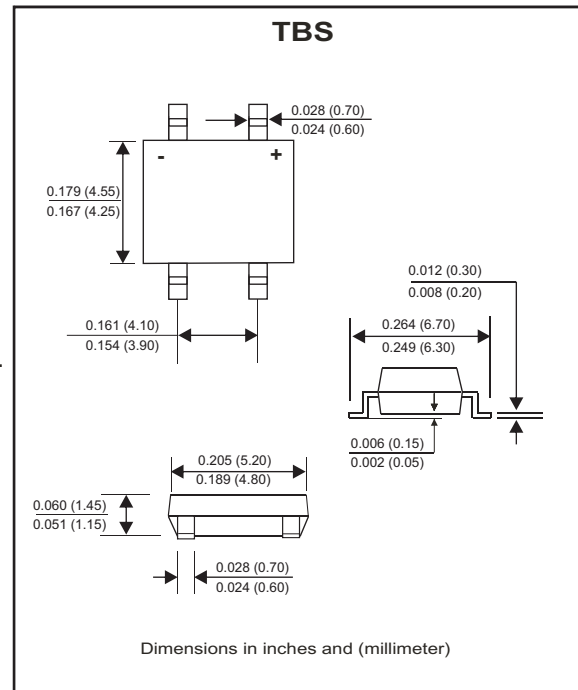


Features

- Glass passivated chip junction.
- High surge overload rating :30A peak
- Save space on printed circuit boards.
- High temperature soldering guaranteed:
260°C/10 seconds at 5 lbs.
- Pb free product.
- Plastic material has U/L flammability classification 94v-0.

Mechanical data

- Polarity: Symbol molded on body.
- Case: Molded plastic body over passivated junction.
- Terminals: Plated leads solderable per MIL-STD-750,
Method 2026.
- Mounting position: Any.



Maximum ratings and electrical characteristics

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

| Parameter | Symbol | TB2S-G | TB4S-G | TB6S-G | TB8S-G | TB10S-G | Unit |
|--|--------------------------------------|--|--------|--------|--------|---------|------|
| | Marking | TB2S | TB4S | TB6S | TB8S | TB10S | |
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Output Current TL=100°C | I _{F(AV)} | 0.8 ¹⁾ 1.0 ²⁾ | | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave, Superimposed on Rated Load (JEDEC Method) | I _{FSM} | 30 | | | | | A |
| Maximum Instantaneous Forward Voltage at 0.4A DC | V _F | 0.95 | | | | | V |
| Maximum Reverse Current @T _A =25°C at Rated DC Blocking Voltage | I _R | 10 | | | | | µA |
| Typical Thermal Junction to lead On aluminum substrate On glass-epoxy substrate | R _{θJL} R _{θJA} | 25 62.5 80 | | | | | °C/W |
| Operating Junction Temperature Range | T _J | -55 to +150 | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | °C |

Notes: 1. On glass epoxy P.C.B
2. On aluminum substrate

RATING AND CHARACTERISTIC CURVES (TB2S-G thru TB10S-G)

Fig.1 - Typical Forward Characteristics

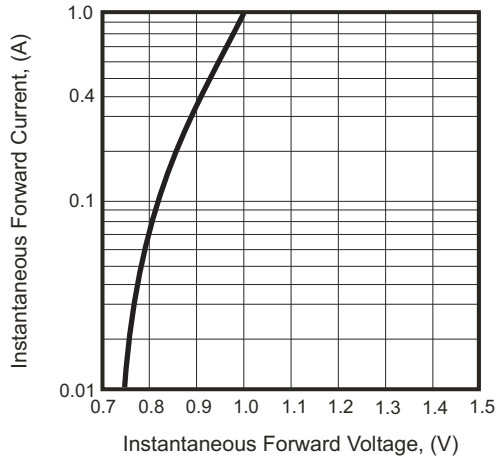


Fig.2 - Forward Derating Curve

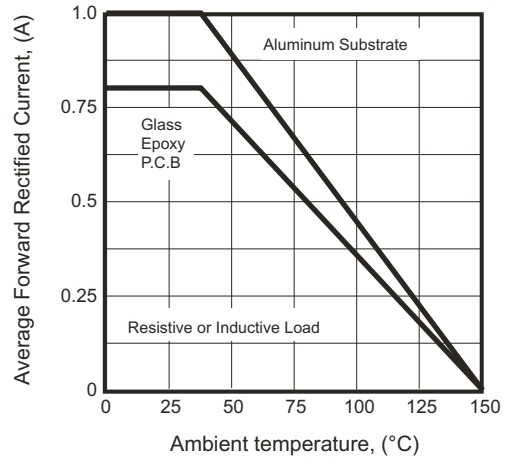


Fig.3 - Typical Reverse Characteristics

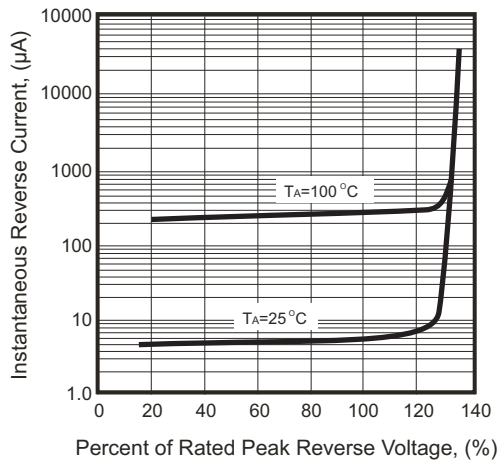
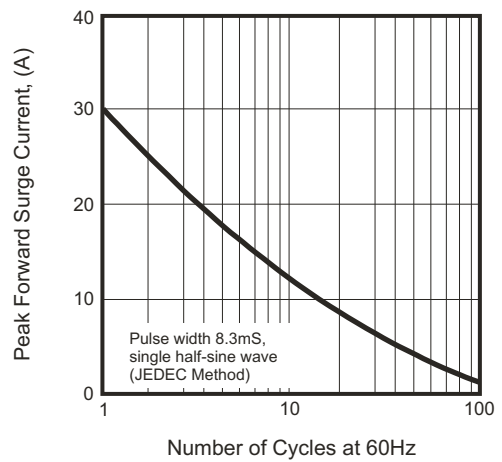
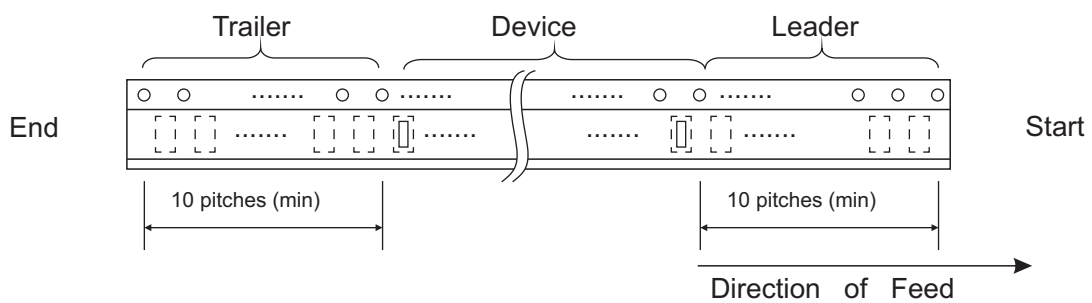
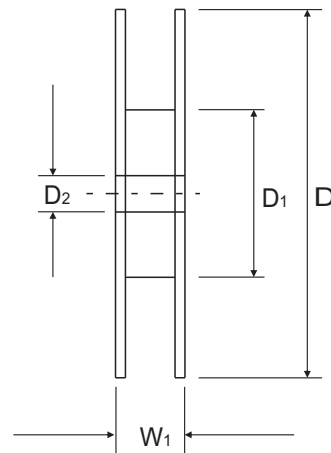
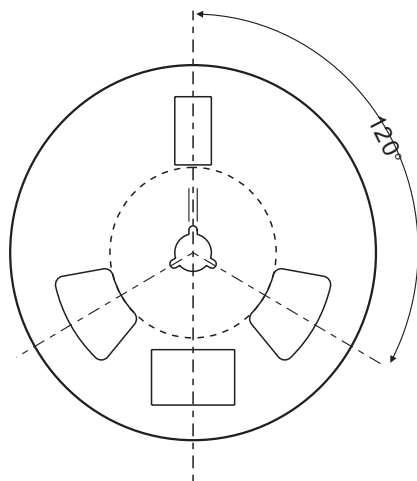
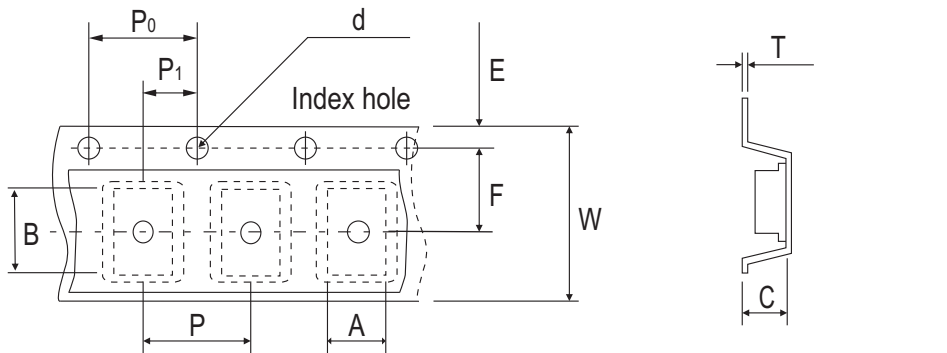


Fig.4 - Peak Forward Surge Current



Reel Taping Specification

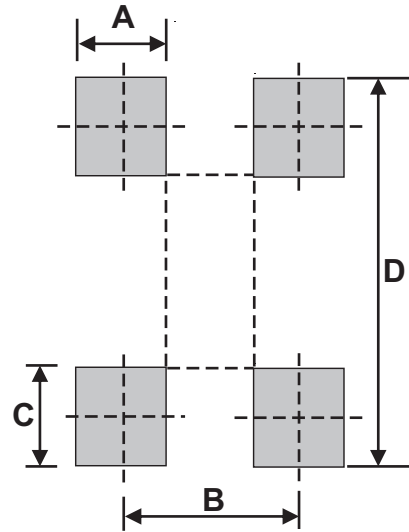


| TBS | SYMBOL | A | B | C | d | D | D ₁ | D ₂ |
|-----|--------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| | (mm) | 5.50 ± 0.10 | 6.85 ± 0.10 | 2.10 ± 0.10 | 1.55 ± 0.05 | 330 ± 0.1 | 75 ± 0.1 | 13.0 ± 0.10 |
| | (inch) | 0.217 ± 0.004 | 0.270 ± 0.004 | 0.083 ± 0.004 | 0.061 ± 0.002 | 12.992 ± 0.004 | 2.953 ± 0.004 | 0.512 ± 0.004 |

| TBS | SYMBOL | E | F | P | P ₀ | P ₁ | T | W | W ₁ |
|-----|--------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.10 | 8.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.05 | 0.30 ± 0.05 | 12.00 ± 0.30 | 18.00 ± 0.1 |
| | (inch) | 0.069 ± 0.004 | 0.217 ± 0.004 | 0.315 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.012 ± 0.002 | 0.472 ± 0.012 | 0.709 ± 0.004 |

Suggested PAD Layout

| SIZE | TBS | |
|------|---------|-------------|
| | (mm) | (inch) |
| A | 0.68MIN | 0.027MIN |
| B | 4.0±0.1 | 0.157±0.004 |
| C | 0.62MIN | 0.024MIN |
| D | 6.70MAX | 0.264MAX |



Standard Packaging

| Case Type | REEL PACK | |
|-----------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| TBS | 1,500 | 13 |