



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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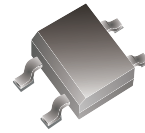


## TB2S-G Thru. TB10S-G

Reverse Voltage: 200 to 1000 Volts

Forward Current: 0.8, 1.0 A

RoHS Device

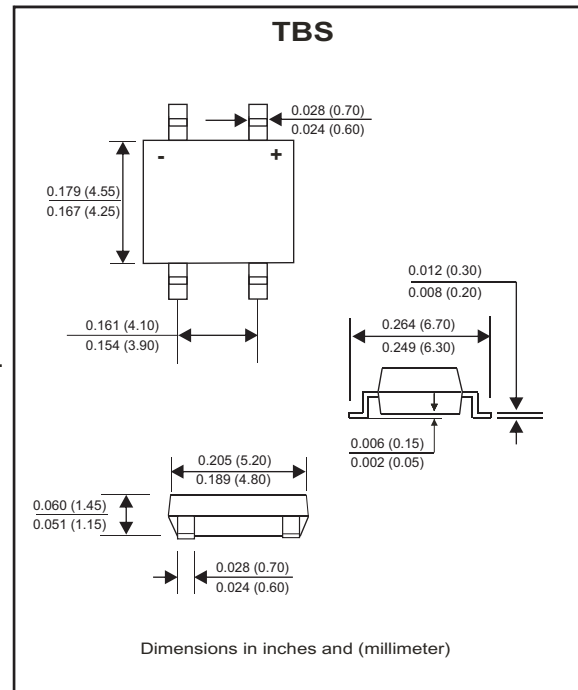


### Features

- 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 <sub>RRM</sub>	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</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 TL=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 (JEDEC Method)	I <sub>FSM</sub>	30					A
Maximum Instantaneous Forward Voltage at 0.4A DC	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 Junction to lead On aluminum substrate On glass-epoxy substrate	R <sub>θJL</sub> R <sub>θJA</sub>	25 62.5 80					°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150					°C
Storage Temperature Range	T <sub>STG</sub>	-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

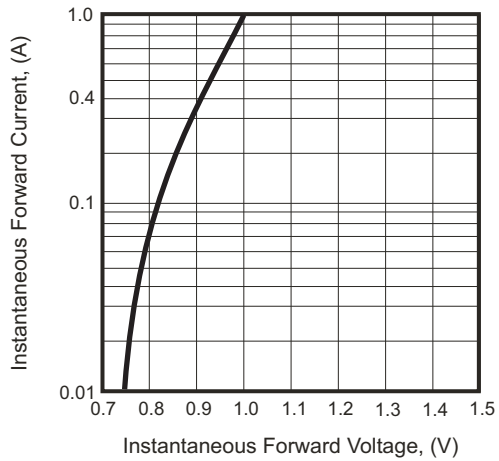


Fig.2 - Forward Derating Curve

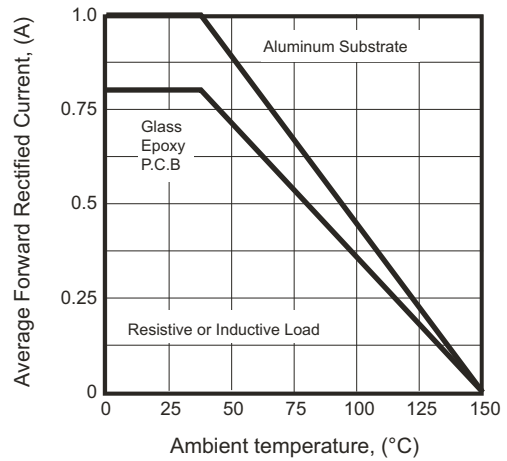


Fig.3 - Typical Reverse Characteristics

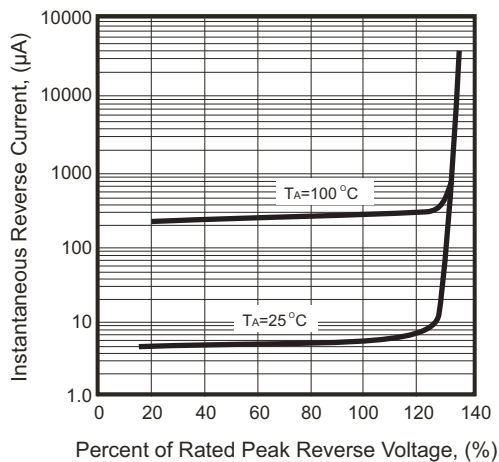
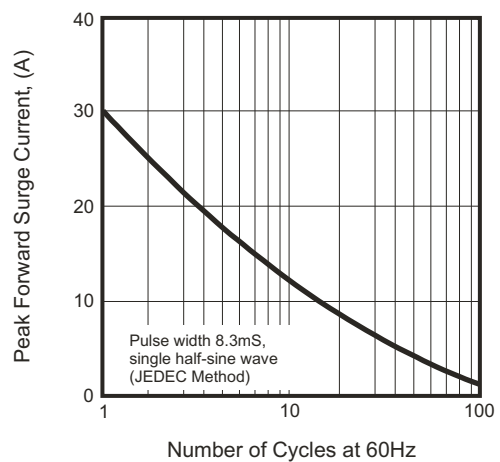
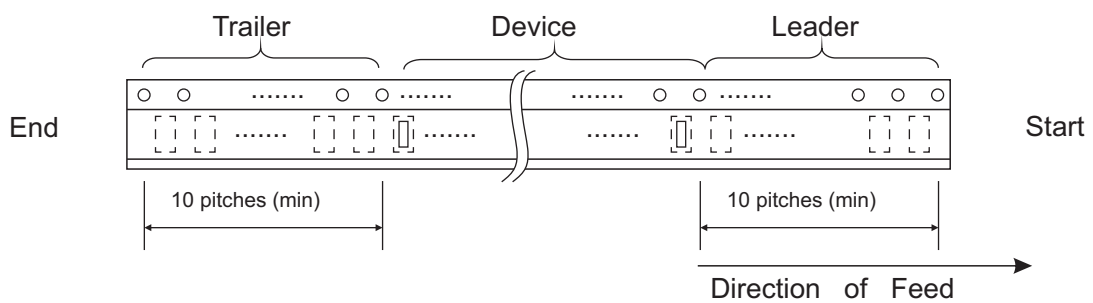
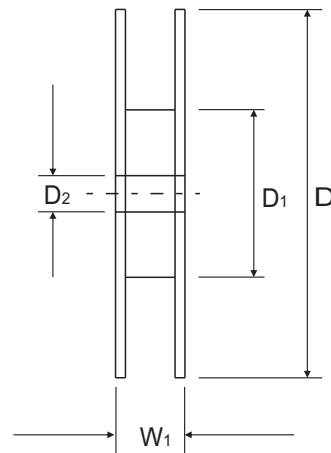
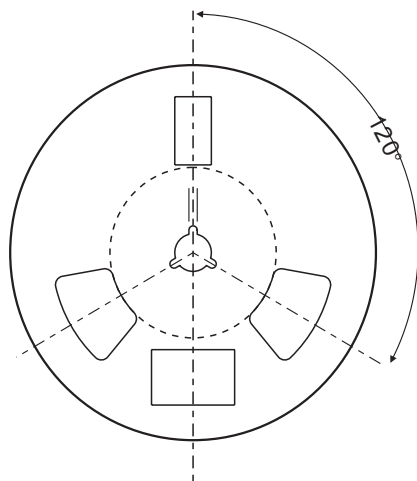
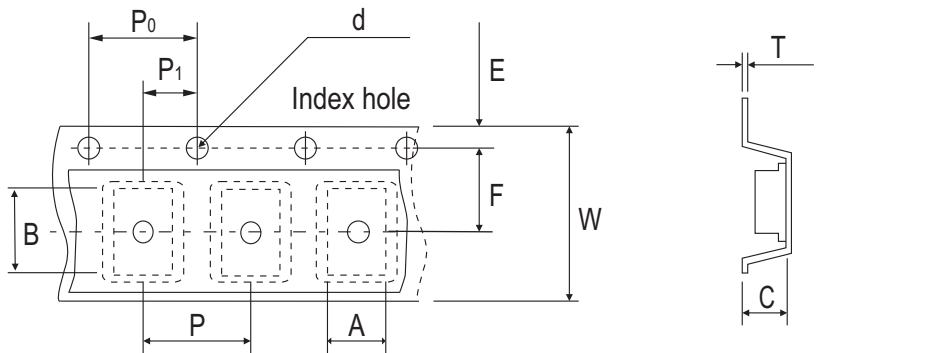


Fig.4 - Peak Forward Surge Current



## Reel Taping Specification

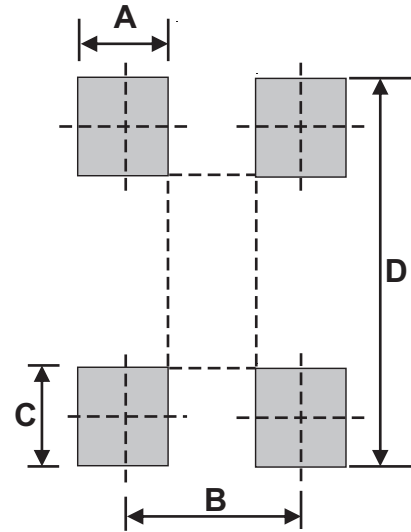


TBS	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	5.50 ± 0.10	6.85 ± 0.10	2.10 ± 0.10	1.55 ± 0.05	330 ± 0.1	75 ± 0.1	13.0 ± 0.10
	(inch)	0.217 ± 0.004	0.270 ± 0.004	0.083 ± 0.004	0.061 ± 0.002	12.992 ± 0.004	2.953 ± 0.004	0.512 ± 0.004

TBS	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(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