

## FEATURES

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

## MECHANICAL DATA

- Case: Molded plastic body over passivated junctions
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026

TBS		
Dim	Min	Max
A	4.80	5.20
B	4.30	4.60
C	1.20	1.50
D	6.15	6.65
E	0.15	0.35
F	0.30	0.90
G	0.20MAX	
H	1.35	1.65
I	0.60	0.80
K	3.80	4.20
All Dimensions in mm		

## Maximum Ratings (@TA = 25°C unless otherwise specified)

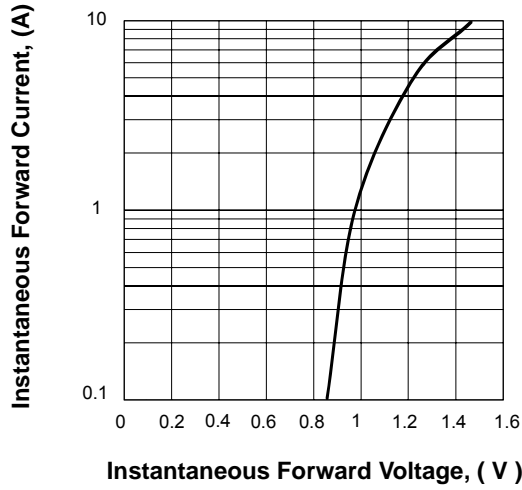
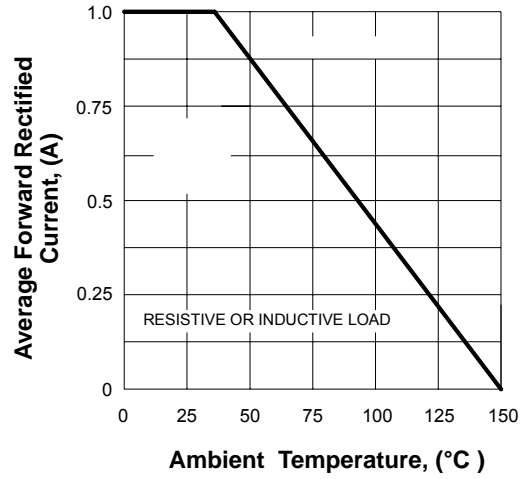
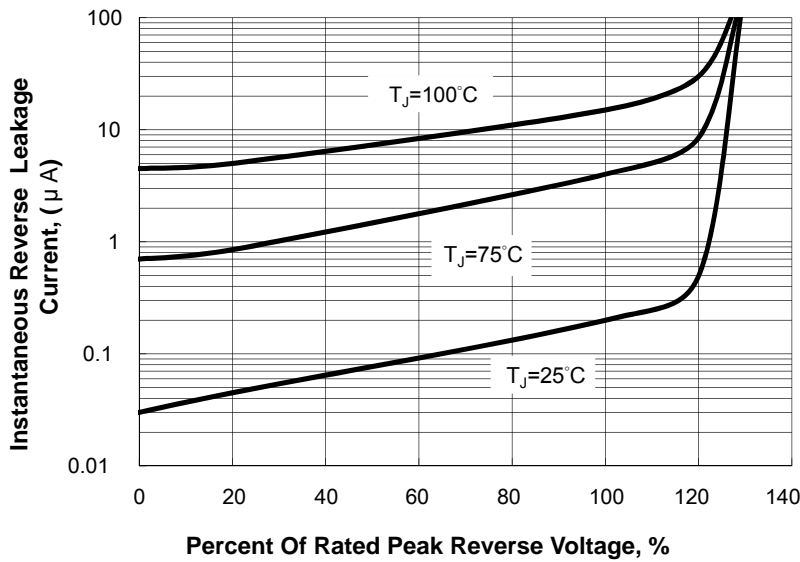
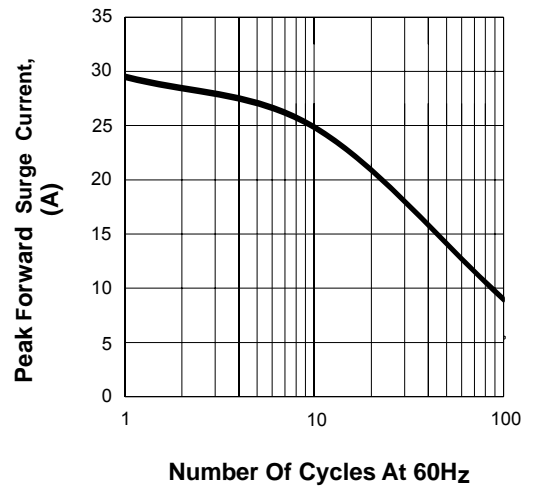
Characteristic	Symbol	TB2S	TB4S	TB6S	TB8S	TB10S	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{RMS}$	140	280	420	560	700	V
DC Blocking Voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum average forward Output current $T_L=100^\circ\text{C}$	$I_{F(AV)}$	0.8 <sup>1)</sup> 1.0 <sup>2)</sup>					A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	$I_{FSM}$	30					A
Current squared time $t < 8.3\text{ms}$ , $T_a = 25^\circ\text{C}$	$I^2t$	3.74					A <sup>2</sup> s

## Thermal Characteristics

Characteristic	Symbol	TB2S	TB4S	TB6S	TB8S	TB10S	UNITS
Typical thermal resistance junction to lead	$R_{\theta JL}$	25					C/W
On aluminum substrate	$R_{\theta JA}$	80					
Operating junction temperature range	$T_J$	- 55 ---- + 150					C
Storage temperature range	$T_{STG}$	- 55 ---- + 150					C

## Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	TB2S	TB4S	TB6S	TB8S	TB10S	UNITS
Maximum instantaneous forward voltage at 0.4 A	$V_F$	0.95					V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage	$I_R$	10					$\mu\text{A}$

**FIG.1 TYPICAL FORWARD CHARACTERISTICS**

**FIG.2 FORWARD DERATING CURVE**

**FIG.3 TYPICAL REVERSE CHARACTERISTICS**

**FIG.4 PEAK FORWARD SURGE CURRENT**


Device	Package	Shipping
TB2S-TB10S	TBS	4000/Tape&Reel