

### YEA SHIN TECHNOLOGY CO., LTD

## TB22S THRU TB220S

Thin Mini-Dip Surface Mount Schottky Bridge Rectifiers 20 to 100 Voltage 2.0 Ampere Current



#### **Features**

- Plastic material used carries Underwriters
   Laborato recognition 94V-0
- Surge overload rating-- 50 amperes peak Ideal for printed circuit board
   Exceeds environmental standards of MIL-S-19500
- ♦ Pb free product at available : 99% Sn above meet RoHS environment substance directive request
- → High temperature soldering guaranteed: 260°C/10 seconds /0.375"(9.5mm) lead length at 5 lbs., (2.3kg) tension

#### **Mechanical Data**

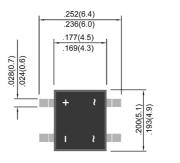
♦ Case: Molded plastic body

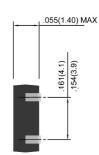
♦ Terminal: Pure tin plated, lead free, Leads solderable per MIL-STD-202 Method 208

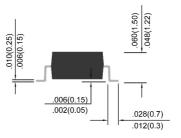
♦ Mounting position : as Marking

♦ Weight: 0.10 grams

# **Thin Mini-Dip** (THIN MD)







Dimensions in inches and (millimeters)

#### 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 current by 20%

Type Number	Symbol	TB22S	TB24S	TB26S	TB28S	TB210S	TB220S	Units
Marking Code		B22S	B24S	B26S	B28S	B210S	B220S	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	200	V
Maximum RMS Voltage	$V_{RMS}$	14	28	42	56	71	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	200	V
Maximum Average Forward Rectified Current On aluminum substrate	I <sub>(AV)</sub>	2.0						Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	50						Α
Maximum Instantaneous Forward Voltage @ 0.4A	V <sub>F</sub>	0.50		0.70	0.85		0.92	V
Maximum DC Reverse Current @ T <sub>A</sub> =25℃ at Rated DC Blocking Voltage	I <sub>R</sub>	200						uA
Typical Thermal resistance Junction to Lead On aluminum substrate On Glass-Epoxy substrate	Rθ <sub>JL</sub> Rθ <sub>JA</sub>	25 62.5 80					°C/W	
Operating Temperature Range	$T_J$	-55 to +150					$^{\circ}$	

## **DEVICE CHARACTERISTICS**

# TB22S THRU TB220S

INSTANTANEOUS FORWARD CURRENT, AMPERES

#### RATINGS AND CHARACTERISTIC CURVES

Fig. 1 - Forward Current Derating Curve

2.0

1.5

1.0

0.5

0.5

Lead Temperature (°C)

Fig. 2 - Forward Characteristics

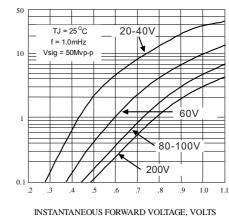


Fig. 3 - Non-Repetitive Surge Current

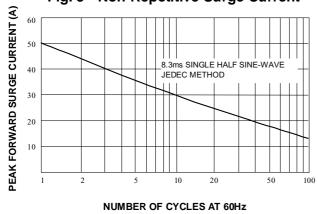
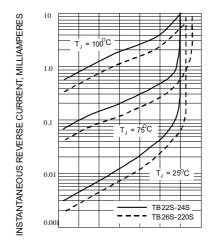
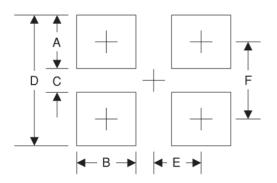


Fig. 4 - Typical Reverse Characteristics



PERCENT OF RATED PEAK REVERSE VOLTAGE, %

## **Suggested PAD Layout**



Symbol	Unit(mm)			
Α	1.5			
В	0.9			
С	4.22			
D	7.22			
Е	2.05			
F	5.72			