



TB14S THRU TB120S

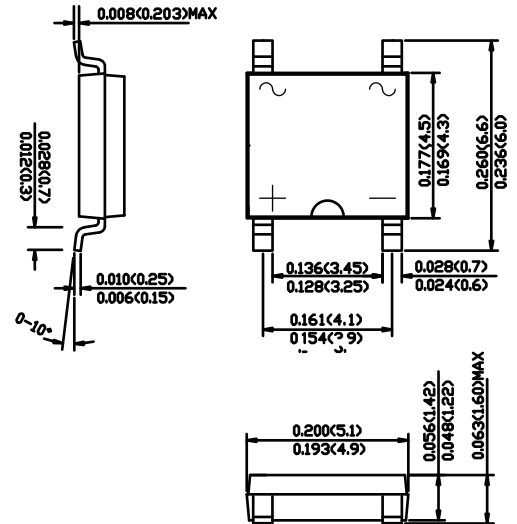
Voltage Range - 40 to 200 V olts Current - 1.0 Ampere

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Features

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability
- ◆ Glass passivated chip junction

TBS **ROHS COMPLIANT**



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC TBS Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

Weight : 0.003 ounce, 0.098 grams

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 current derate by 20%.

Parameter	SYMBOLS	MDD TB14S	MDD TB16S	MDD TB18S	MDD TB110S	MDD TB120S	UNITS	
Marking Code								
Maximum repetitive peak reverse voltage	V_{RRM}	40	60	80	100	200	V	
Maximum RMS voltage	V_{RMS}	28	42	56	70	140	V	
Maximum DC blocking voltage	V_{DC}	40	60	80	100	200	V	
Maximum average forward rectified current	$I_{F(AV)}$	1.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	40		30				A
Maximum instantaneous forward voltage drop per leg at 1A	V_F	0.55	0.70	0.85				V
Maximum DC reverse current at rated DC blocking voltage	I_R	0.3 10		0.2 5		0.1 2	mA mA	
Typical thermal resistance	$R_{\theta JA}$	95						°C/W
Typical junction capacitance	C_j	110	80					pF
Operating temperature range	T_J	-55 to +150						°C
storage temperature range	T_{Stg}	-55 to +150						°C

NOTE: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy P C board with 4 X (5X5mm) copper pad.



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Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

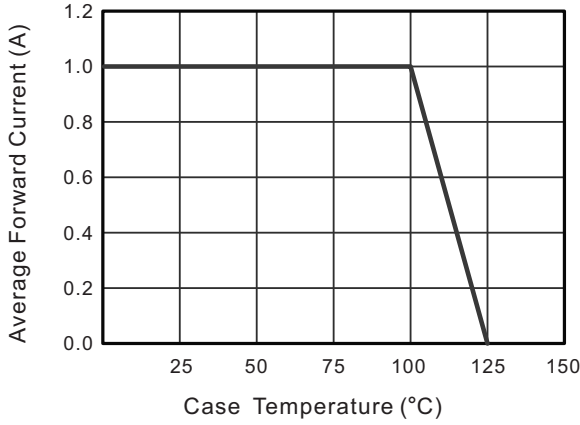


Fig.2 Typical Reverse Characteristics

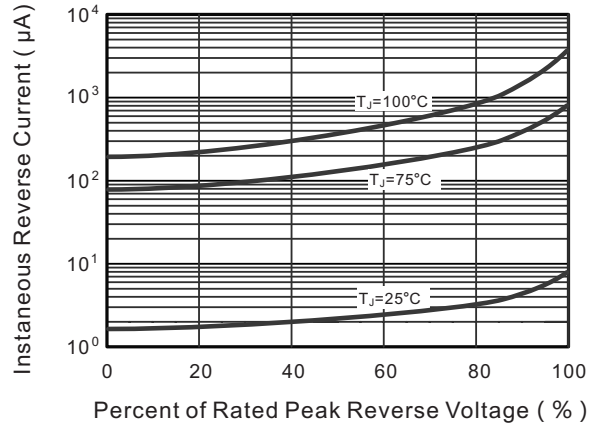


Fig.3 Typical Forward Characteristic

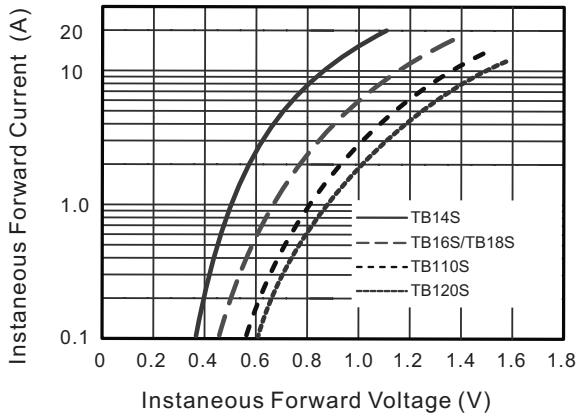


Fig.4 Typical Junction Capacitance

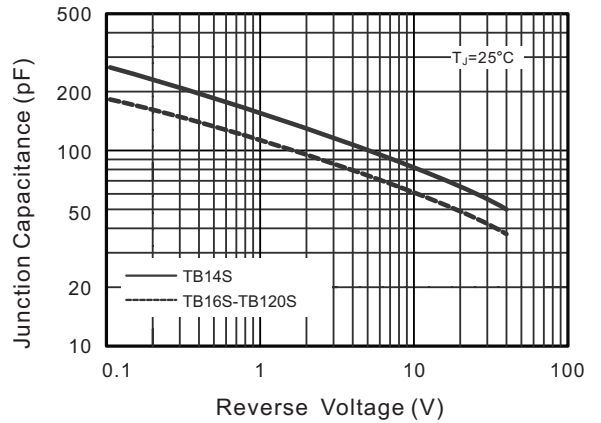


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

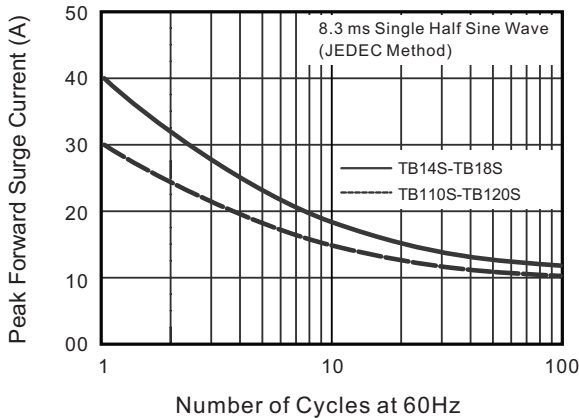
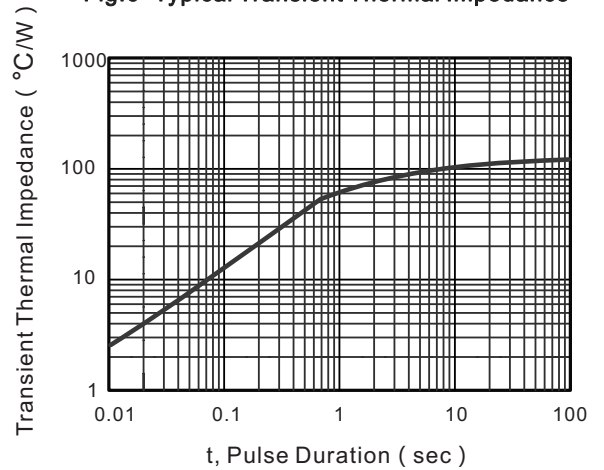


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.