



TSS4B01G THRU TSS4B03G

Single Phase 4.0 Amps. Glass Passivated Super Fast Bridge Rectifiers



Voltage Range
50 to 200 Volts
Current
4.0 Amperes

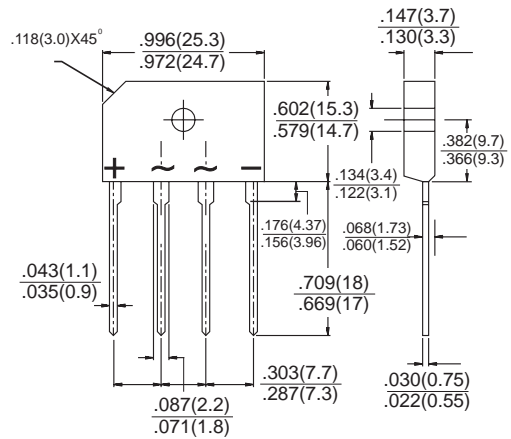
Features

- ✧ UL recognized file # E-96005
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✧ Low Forward Voltage Drop.
- ✧ High case dielectric strength of 2000V_{RMS}

Mechanical Data

- ✧ Case: Molded plastic
- ✧ Terminals: Leads solderable per MIL-STD-750, Method 2026
- ✧ Weight: 0.15 ounce, 4 grams
- ✧ Mounting torque: 5 in. lbs. max.

TS4B



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

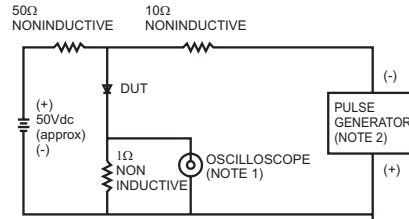
Type Number	Symbol	TSS4B01G	TSS4B02G	TSS4B03G	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	V
Maximum RMS Voltage	V_{RMS}	35	70	140	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	V
Maximum Average Forward Rectified Current @ $T_C=100^\circ\text{C}$	$I_{(AV)}$	4.0			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150			A
Maximum Instantaneous Forward Voltage @ 4.0A	V_F	0.98			V
Maximum Reverse Recovery Time(Note 1)	T_{rr}	35			nS
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 500			μA μA
Typical Thermal Resistance (Note 2)	$R_{\theta_{JC}}$	5.5			$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150			$^\circ\text{C}$

Note: 1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.

2. Thermal Resistance from Junction to Case with Device Mounted on 2" x 3" x 0.25" Al-Plate Heatsink.

RATINGS AND CHARACTERISTIC CURVES (TSS4B01G THRU TSS4B03G)

FIG. 1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf
2. Rise Time=10ns max. Source Impedance= 50 ohms

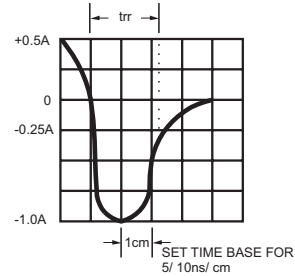


FIG. 2- MAXIMUM FORWARD CURRENT DERATING CURVE

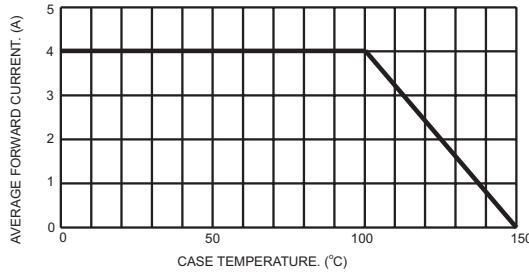


FIG. 3- TYPICAL REVERSE CHARACTERISTICS

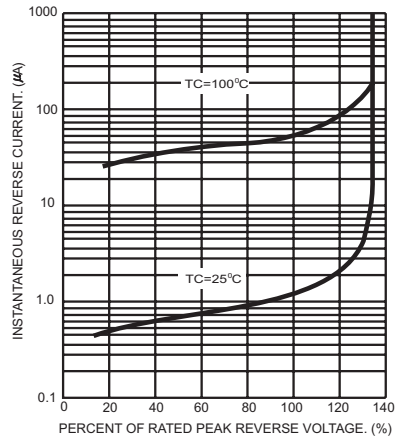


FIG. 4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

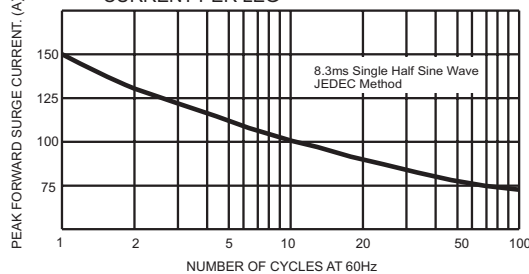


FIG. 6- TYPICAL FORWARD CHARACTERISTICS PER LEG

