TSC 9b

TS4B01G THRU TS4B07G

Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers



Voltage Range 50 to 1000 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
- Surge overload rating to 120 amperes peak
- → High case dielectric strength of 2000V_{RMS}

Mechanical Data

♦ Case: Molded plastic

♦ Weight: 0. 15 ounce, 4 grams

♦ Mounting torque: 5 in. lbs. Max.

TS4B .147(3.7) 118(3.0)X45 .996(25.3) 972(24.7) .602(15.3) .579(14.7) .382(9.7) .122(3.1) .176(4.37) .156(3.96) .068(1.73) .060(1.52) .043(1.1) .709(18) .669(17) .303(7.7).030(0.75) 287(7.3) .022(0.55) .087(2.2).071(1.8)

Dimensions in inches and (millimeters)

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	TS4B	TS4B	TS4B	TS4B	TS4B	TS4B	TS4B	Units
		01G	02G	03G	04G	05G	06G	07G	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current $@T_C = 115^{\circ}C$	I _(AV)				4.0				Α
Peak Forward Surge Current, 8.3 ms Single Half Sne-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	120							Α
Maximum Instantaneous Forward Voltage @ 4.0A	V_{F}	1.0							٧
Maximum DC Reverse Current @ T _A =25℃					5.0				uA
at Rated DC Blocking Voltage @ T _A =125℃	I _R				500				uA
Typical Thermal Resistance (Note)	$R\theta_{JC}$				5.5				3
Operating Temperature Range	TJ	-55 to +150							ರ
Storage Temperature Range	T _{STG}	-55 to + 150							Ų

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



RATINGS AND CHARACTERISTIC CURVES (TS4B01G THRU TS4B07G)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT 175 PEAK FORWARD SURGE CURRENT. (A) 8.3ms Single Half Sine Wave JEDEC METHOD 125 100 75 50 25 2 5 10 50 100 NUMBER OF CYCLES AT 60Hz

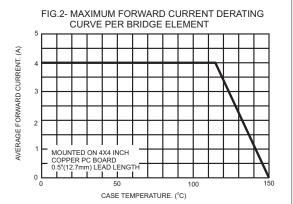


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT 40 INSTANTANEOUS FORWARD CURRENT. (A) 20 10 2 Tj=125°C 8.3ms Single Half Sine Wave 0.4 0.2 0.1 0.6 0.9 1.0 1.2 INSTANTANEOUS FORWARD VOLTAGE. (V)

