**TSC 9b** 

# TS6P01G THRU TS6P07G

Single Phase 6.0 Amps. Glass Passivated Bridge Rectifiers



Voltage Range 50 to 1000 Volts Current 6.0 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 150 amperes peak
- ♦ High case dielectric strength of 2000V<sub>RMS</sub>
- Isolated voltage from case to lead over 2500 volts

#### Mechanical Data

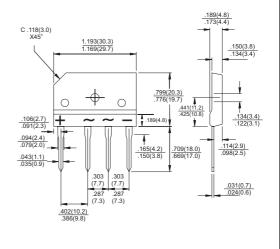
♦ Case: Molded plastic

Terminals: Leads solderable per MIL-STD-750, Method 2026

♦ Weight: 0.3 ounce, 8 grams

♦ Mounting torque: 8.17 in. lbs. max.

## TS-6P



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%

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Type Number	Symbol		TS6P			TS6P		TS6P	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 See Fig. 2	I <sub>(AV)</sub>	6.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	150							Α
Maximum Instantaneous Forward Voltage @ 6.0A	V <sub>F</sub>	1.0							V
Maximum DC Reverse Current @ T <sub>A</sub> =25°C	I <sub>R</sub>	5.0							uA
at Rated DC Blocking Voltage @ T <sub>A</sub> =125℃	ıR				500				uA
Typical Thermal Resistance (Note)	$R\theta_{JC}$	1.8							C/W
Operating Temperature Range	TJ	-55 to +150							C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150							C

Note: Thermal Resistance from Junction to Case with Device Mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.



### RATINGS AND CHARACTERISTIC CURVES (TS6P01G THRU TS6P07G)

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

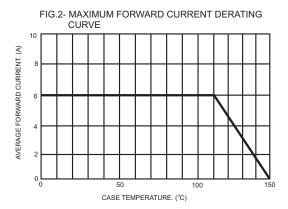


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT INSTANTANEOUS FORWARD CURRENT. (A) Tj=25°C Pulse Width=300µs 1% Duty Cycle 0.1 0.01

FORWARD VOLTAGE. (V)

1.6 1.8 2.0

0.8

