TSC 9b

TS6P01G THRU TS6P07G

Single Phase 6.0 Amps. Glass Passivated Bridge Rectifiers



Voltage Range 50 to 1000 Volts Current 6.0 Amperes

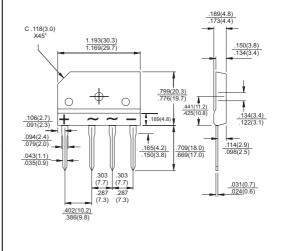
Features

- ♦ 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_{RMS}
- 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.

<u>TS-6P</u>



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				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 _(AV)	6.0							Α
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150							Α
Maximum Instantaneous Forward Voltage @ 6.0A	V _F	1.0							V
Maximum DC Reverse Current @ T _A =25°C	I _R				5.0				uA
at Rated DC Blocking Voltage @ T _A =125℃	'K				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 _{STG}	-55 to + 150							T

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

0.01

0.8



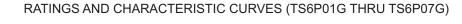


FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

175

150

150

8.3ms Single Half Sine Wave JEDEC METHOD

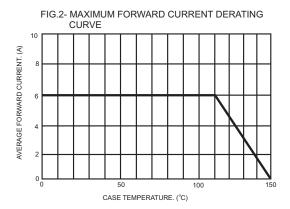
125

75

100

100

NUMBER OF CYCLES AT 60Hz



CHARACTERISTICS PER BRIDGE ELEMENT

(v)

Tip=25°C
Pulse Width=300µs
1% Duty Cycle

FORWARD VOLTAGE. (V)

1.6 1.8 2.0

FIG.3- TYPICAL INSTANTANEOUS FORWARD

