



TS6P01G THRU TS6P07G

Single Phase 6.0 Amps. Glass Passivated Bridge Rectifiers



Voltage Range
50 to 1000 Volts
Current
6.0 Amperes

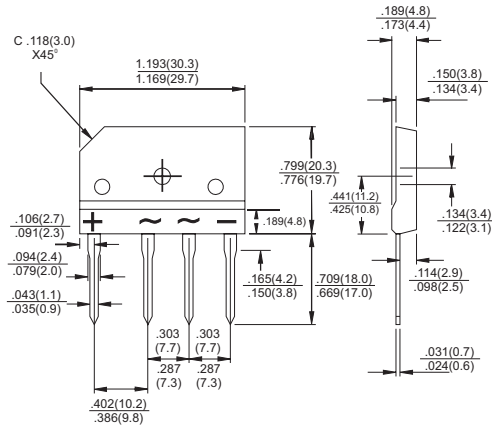
Features

- ✧ 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.

TS-6P



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 01G | TS6P 02G | TS6P 03G | TS6P 04G | TS6P 05G | TS6P 06G | TS6P 07G | Units |
|---|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------------------|
| 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 | | | | | | | 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 @ 6.0A | V_F | 1.0 | | | | | | | V |
| 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) | $R\theta_{JC}$ | 1.8 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Note: 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

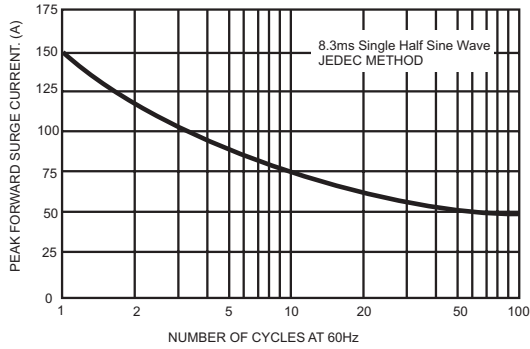


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

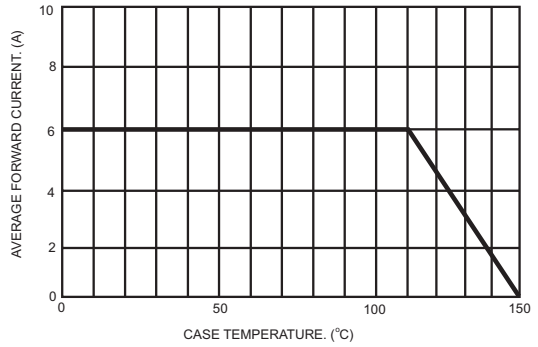


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

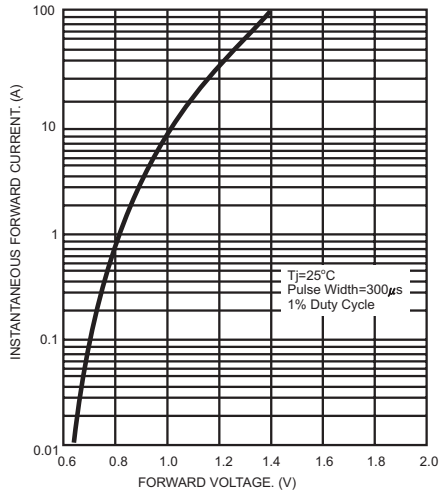


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

