

**TS10P01G THRU TS10P07G**

## Single Phase 10.0 Amps. Glass Passivated Bridge Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
10.0 Amperes

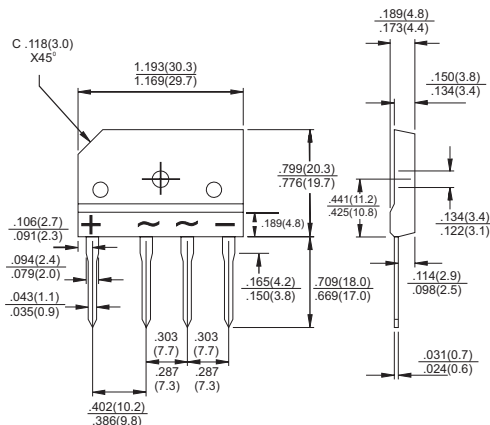
## Features

- ✧ 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 170 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%

| Type Number   | Symbol         | TS10P<br>01G | TS10P<br>02G | TS10P<br>03G | TS10P<br>04G | TS10P<br>05G | TS10P<br>06G | TS10P<br>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<br>See Fig. 2   | $I_{(AV)}$     | 10.0         |              |              |              |              |              |              | A             |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated<br>Load (JEDEC method ) | $I_{FSM}$      | 200          |              |              |              |              |              |              | A             |
| Maximum Instantaneous Forward Voltage<br>@ 10.0A  | $V_F$          | 1.1          |              |              |              |              |              |              | V             |
| Maximum DC Reverse Current @ $T_A=25^{\circ}C$<br>at Rated DC Blocking Voltage @ $T_A=125^{\circ}C$       | $I_R$          | 5.0<br>500   |              |              |              |              |              |              | uA<br>uA      |
| Typical Thermal Resistance (Note)   | $R\theta_{JC}$ | 1.4          |              |              |              |              |              |              | $^{\circ}C/W$ |
| Operating Temperature Range   | $T_J$          | -55 to +150  |              |              |              |              |              |              | $^{\circ}C$   |
| Storage Temperature Range   | $T_{STG}$      | -55 to + 150 |              |              |              |              |              |              | $^{\circ}C$   |

Note: Thermal Resistance from Junction to Case with Device Mounted on 4" x 6" x 0.25" Al-Plate Heatsink.

## RATINGS AND CHARACTERISTIC CURVES (TS10P01G THRU TS10P07G)

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

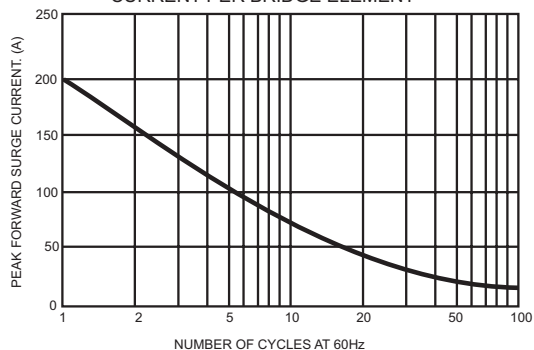


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

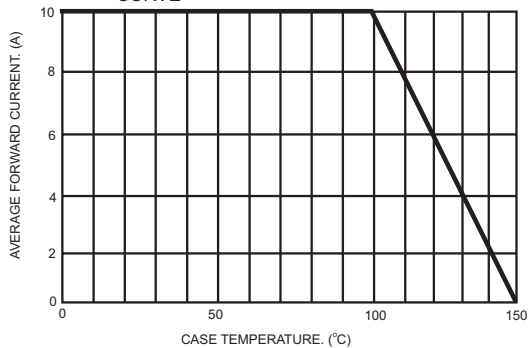


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

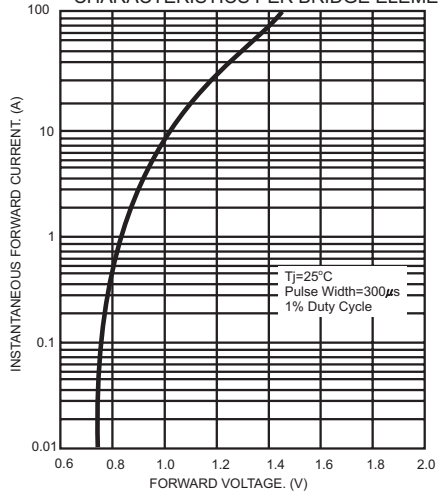


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

