



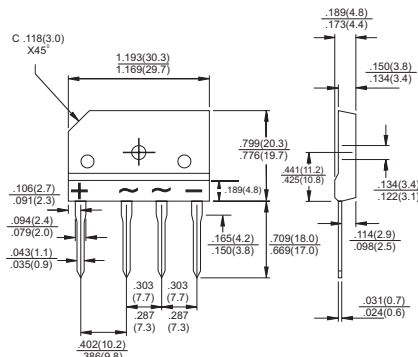
# TS15P01G THRU TS15P07G

Single Phase 15.0 AMPS. Glass Passivated Bridge Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
15.0 Amperes

## TS-6P



Dimensions in inches and (millimeters)

## 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 200 amperes peak
- ✧ High case dielectric strength of 2000 V<sub>RMS</sub>

## 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.

## 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                         | TS15P01G     | TS15P02G | TS15P03G | TS15P04G | TS15P05G | TS15P06G | TS15P07G | Units    |
|-----------------------------------------------------------------------------------------------------------|--------------------------------|--------------|----------|----------|----------|----------|----------|----------|----------|
| Maximum Recurrent Peak Reverse Voltage                                                                    | V <sub>RRM</sub>               | 50           | 100      | 200      | 400      | 600      | 800      | 1000     | V        |
| Maximum RMS Voltage                                                                                       | V <sub>RMS</sub>               | 35           | 70       | 140      | 280      | 420      | 560      | 700      | V        |
| Maximum DC Blocking Voltage                                                                               | V <sub>DC</sub>                | 50           | 100      | 200      | 400      | 600      | 800      | 1000     | V        |
| Maximum Average Forward Rectified Current<br>See Fig. 1                                                   | I <sub(av)< sub=""></sub(av)<> | 15.0         |          |          |          |          |          |          | A        |
| Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated<br>Load (JEDEC method ) | I <sub>FSM</sub>               | 200          |          |          |          |          |          |          | A        |
| Maximum Instantaneous Forward Voltage<br>@ 15A                                                            | V <sub>F</sub>                 | 1.1          |          |          |          |          |          |          | V        |
| Maximum DC Reverse Current @ T <sub>A</sub> =25°C<br>at Rated DC Blocking Voltage @ T <sub>A</sub> =125°C | I <sub>R</sub>                 | 10.0<br>500  |          |          |          |          |          |          | uA<br>uA |
| Typical Thermal Resistance (Note)                                                                         | R <sub>θJC</sub>               | 0.8          |          |          |          |          |          |          | °C/W     |
| Operating Temperature Range                                                                               | T <sub>J</sub>                 | -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 300mm x 300mm x 1.6mm Cu Plate Heatsink.

## RATINGS AND CHARACTERISTIC CURVES (TS15P01G THRU TS15P07G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

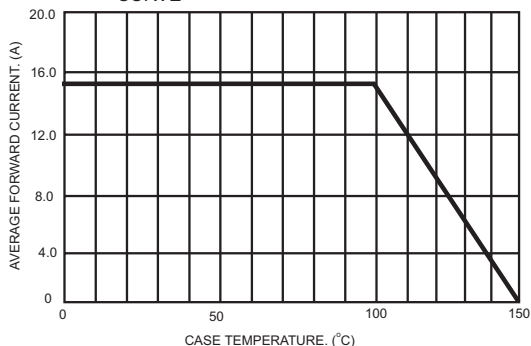


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

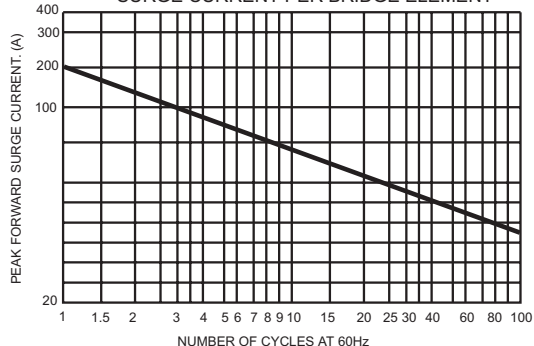


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

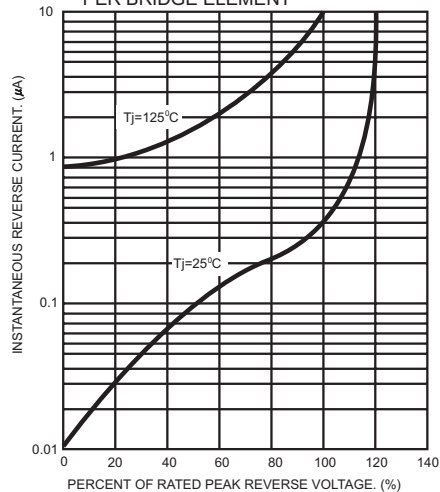


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

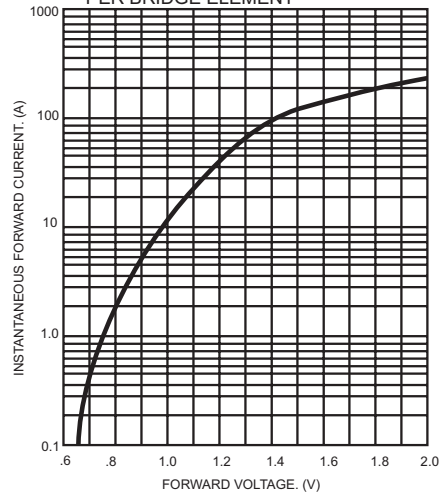


FIG.5- TYPICAL TRANSIENT THERMAL IMPEDANCE

