

# TS20P01G - TS20P07G

Single Phase 20.0 AMPS.  
Glass Passivated Bridge Rectifiers

## TS-6P

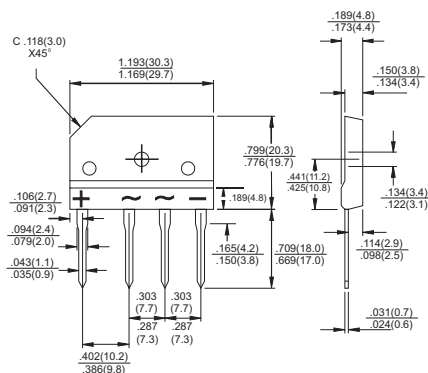


## Features

- ✧ 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 250 amperes peak
- ✧ High case dielectric strength of 2000 V<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.



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	TS20P 01G	TS20P 02G	TS20P 03G	TS20P 04G	TS20P 05G	TS20P 06G	TS20P 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. 1	$I_{(AV)}$	20.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	250							A
Maximum Instantaneous Forward Voltage @ 10A @ 20A	$V_F$	1.0 1.1							V
Maximum DC Reverse Current @ $T_A=25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ }^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$ $\mu\text{A}$
Typical Thermal resistance (Note)	$R_{\theta JC}$	0.8							$^\circ\text{C/W}$
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 300mm x 300mm x 1.6mm Cu Plate Heatsink.

## RATINGS AND CHARACTERISTIC CURVES (TS20P01G THRU TS20P07G)

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

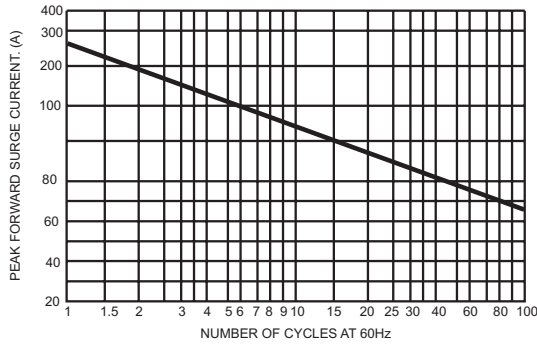


FIG.2- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

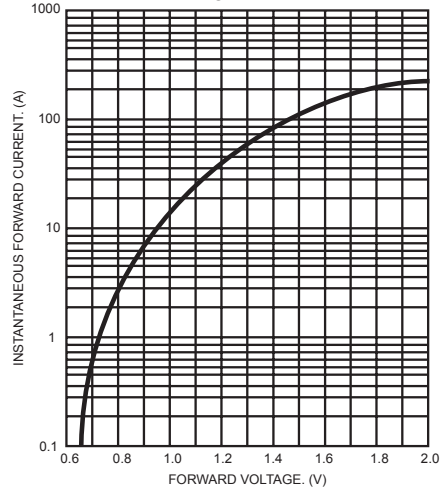


FIG.3- MAXIMUM FORWARD CURRENT DERATING CURVE

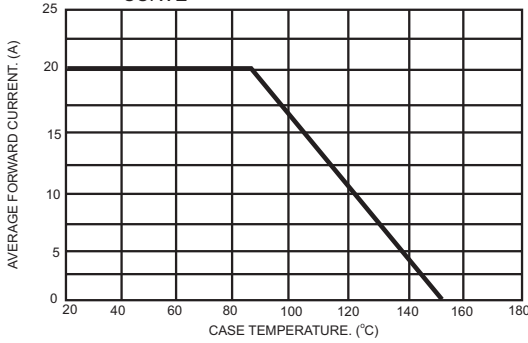


FIG.5- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

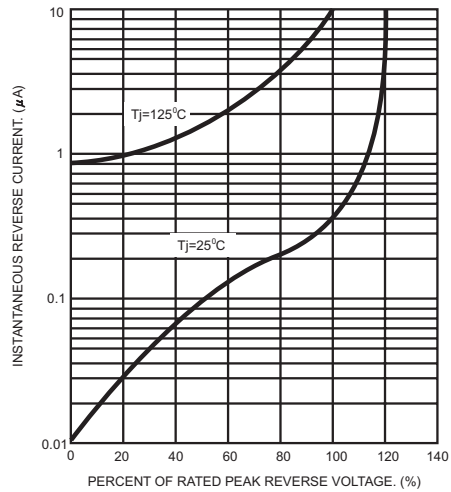


FIG.4- TYPICAL JUNCTION CAPACITANCE

