

TAIWAN SEMICONDUCTOR RoHS —

# Single Phase 10.0 AMPS. Glass Passivated Bridge Rectifiers



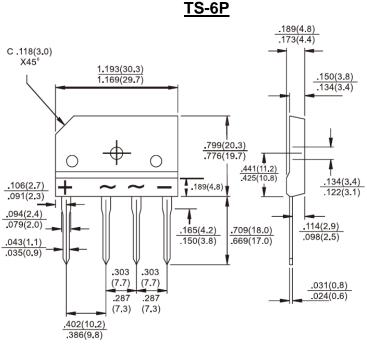


### Features

- ♦ UL Recoganized File # E-326243
- ♦ Glass passivated junction
- ♦ Ideal for printed circuit board
- ♦ High case dielectric strength of 2000V<sub>RMS</sub>
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ♦ Typical IR less than 0.1uA
- ♦ High surge current capability to 200A
- ↔ High temperature soldering guaranteed:
   260 °C / 10 seconds at 5 lbs.,(2.3kg) tension
- ♦ Green compound with suffix "G" on packing code & prefix "G" on datecode.

### Mechanical Data

- ♦ Case: Molded plastic body
- Terminals: Pure tin plated, Lead free, Leads solderable per MIL-STD-202, Method 208
- ♦ Weight: 7.15 grams
- ♦ Mounting torque : 8.17 in-lbs Max.



#### Dimensions in inches and (millimeters)

#### Marking Diagram

TS10P0XG

G

Y

WW

- TS10P0XG
- = Specific Device Code
  - = Green Compound
  - = Year
  - = Work Week

## **Maximum Ratings and Electrical Characteristics**

Rating at 25  $^\circ\!\mathrm{C}$  ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

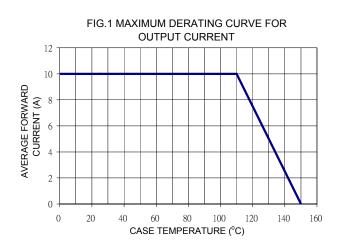
Type Number         TS10P	TS10P 06G	TS10P 07G	Units
virginity         virginity <thvirginity< th="">         virginity         <thvirginity< th="">         virginity         <thvirginity< th=""> <thvirginity< th=""> <thvir< td=""><td>800</td><td>1000</td><td>V</td></thvir<></thvirginity<></thvirginity<></thvirginity<></thvirginity<>	800	1000	V
Voltage V <sub>RMS</sub> 35 70 140 280 420	560	700	V
locking Voltage V <sub>DC</sub> 50 100 200 400 600	800	1000	V
age Forward Rectified Current I <sub>F(AV)</sub> 10			А
Surge Current, 8.3 ms Single Half Sine- osed on Rated Load (JEDEC method)			А
(t < 8.3mS)   <sup>2</sup> t 166			A <sup>2</sup> S
ntaneous Forward Voltage (Note 1) @ 5 A V <sub>F</sub> 1.0 @10 A 1.1			V
Reverse Current@ $T_A = 25 \degree C$ 10bocking Voltage@ $T_A = 125 \degree C$ IR500			uA uA
n Capacitance Per Leg (Note 2) Cj 77			pF
I Resistance R <sub>eJC</sub> 1.4			<sup>o</sup> C/W
perature Range T <sub>J</sub> - 55 to + 150			°C
rature Range T <sub>STG</sub> - 55 to + 150			°C
berature Range $T_{\rm J}$ - 55 to + 150			

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2 : Measured at 1MHz and applied Reverse bias of 4.0V DC.



#### RATINGS AND CHARACTERISTIC CURVES (TS10P01G THRU TS10P07G)





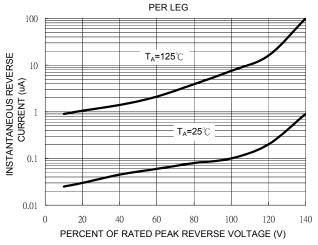
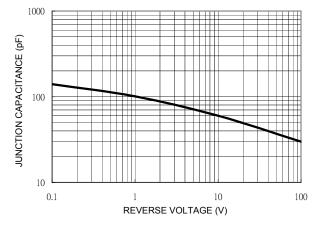


FIG. 5 TYPICAL JUNCTION CAPACITANCE



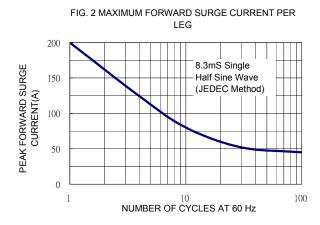


FIG. 4 TYPICAL FORWARD CHARACTERISRICS

