

# TS6P01G - TS6P07G

## Single Phase 6.0 AMPS.

### Glass Passivated Bridge Rectifiers

#### TS6P

### Features

- ✧ UL Recognized 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 150A
- ✧ High temperature soldering guaranteed:  
260°C / 10 seconds at 5 lbs., ( 2.3 kg ) tension
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

### Mechanical Data

- ✧ Case : Molded plastic body
- ✧ Terminal : Pure tin plated , Lead free. Leads solderable per MIL-STD-202 Method 208
- ✧ Weight : 7.15 grams ( 0.268 ounce )
- ✧ Mounting Torque : 8.17 in-lbs Max.

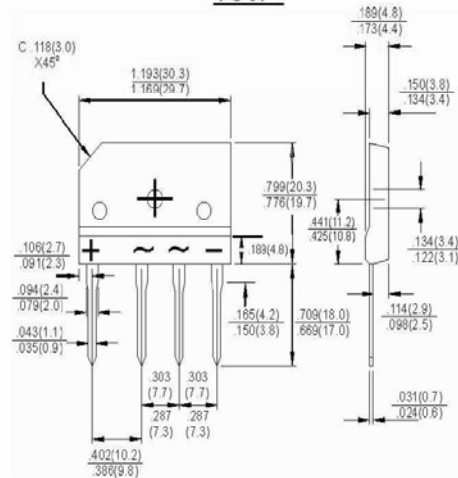
### Maximum Ratings and Electrical Characteristics

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	TS6P01G	TS6P02G	TS6P03G	TS6P04G	TS6P05G	TS6P06G	TS6P07G	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 @ T <sub>c</sub> = 110°C	I <sub>(AV)</sub>	6.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	I <sub>FSM</sub>	150							A
Rating of fusing ( t < 8.3ms )	I <sup>2</sup> t	93							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage @ 3.0A @ 6.0A	V <sub>F</sub>	1.0 1.1							V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	I <sub>R</sub>	10 500							uA
Typical Junction Capacitance per leg (Note 1)	C <sub>j</sub>	53							pF
Typical Thermal Resistance (Note 2)	R <sub>BJC</sub>	1.8							oC/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

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

2. Device mounted on 2" x 3" x 0.25" Al-plate heat sink,



Dimension in inches and (millimeter)

### Marking Diagram



TS6P0XG = Specific Device code  
G = Green Compound  
Y = Year Code  
WW = Work Week Code

### Rating and Sharacteristic Curves (TS6P01G Thru TS6P07G)

FIG 1 Maximum Derating Curve for Output Current

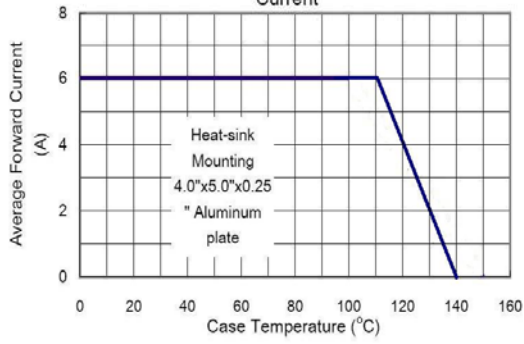


FIG 2 Maximum Forward Surge Current per Leg

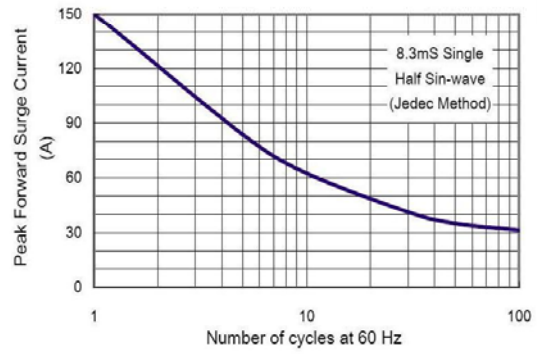


FIG 3 Typical Reverse Characteristics per Leg

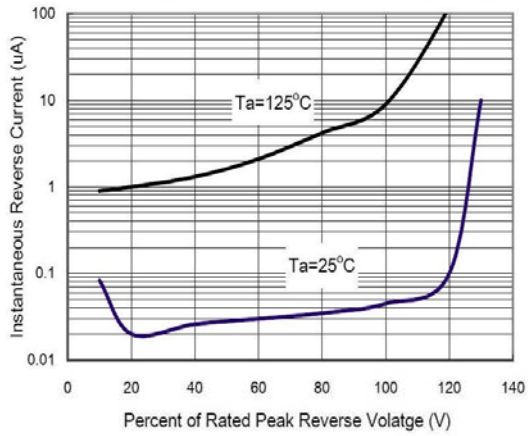


FIG 4 Typical Forward Characteristics per Leg.

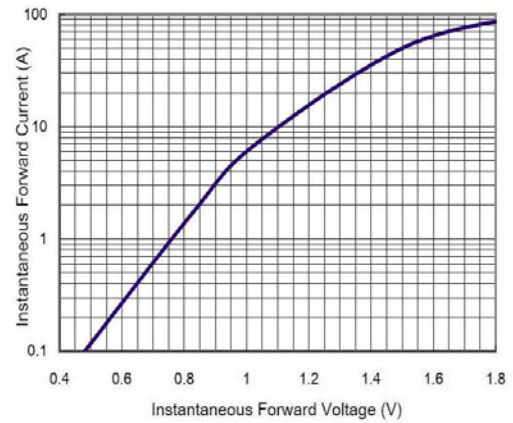


FIG 5 Typical Junction Capacitance

