



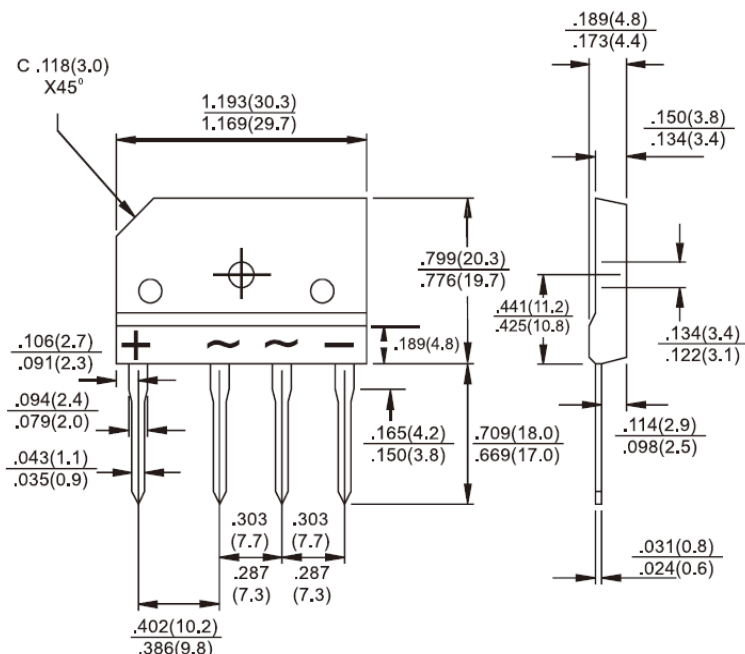
**RoHS**  
COMPLIANCE



### TS-6P

### Features

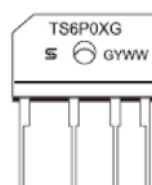
- ✧ UL Recognized File # E-326243
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ High case dielectric strength of 2000V<sub>RMS</sub>
- ✧ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✧ Typical IR less than 0.1 uA
- ✧ High surge current capability to 150A
- ✧ 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

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

### 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	TS6P 01G	TS6P 02G	TS6P 03G	TS6P 04G	TS6P 05G	TS6P 06G	TS6P 07G	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>F(AV)</sub>	6							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 (Note 1) @ 3 A @ 6 A	V <sub>F</sub>	1.0 1.1							V
Maximum DC Reverse Current @ T <sub>A</sub> =25 °C at Rated DC Blocking Voltage @ T <sub>A</sub> =125 °C	I <sub>R</sub>	10 500							uA uA
Typical Junction Capacitance Per Leg (Note 2)	C <sub>j</sub>	53							pF
Typical Thermal Resistance	R <sub>θJC</sub>	1.8							°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 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

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

## RATINGS AND CHARACTERISTIC CURVES (TS6P01G THRU TS6P07G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

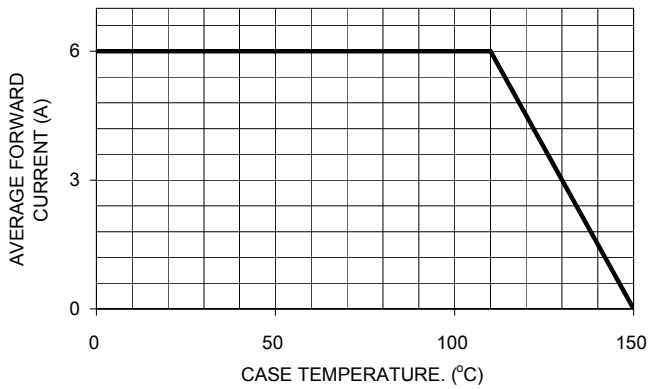


FIG. 2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

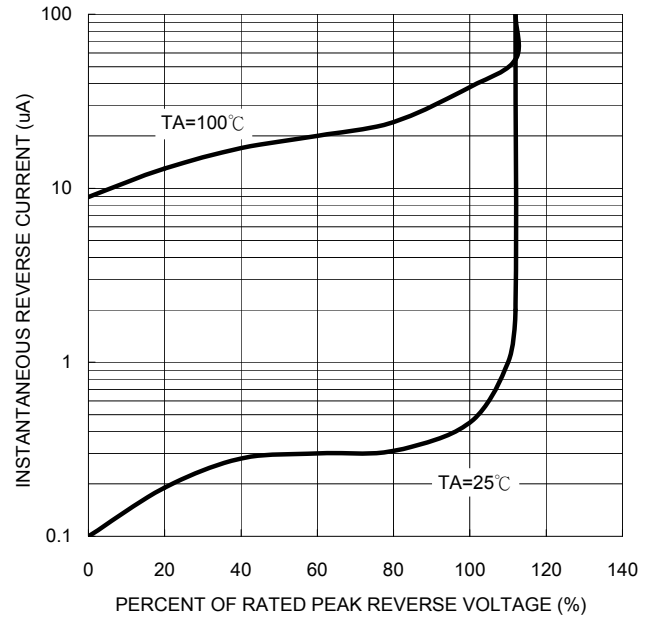


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

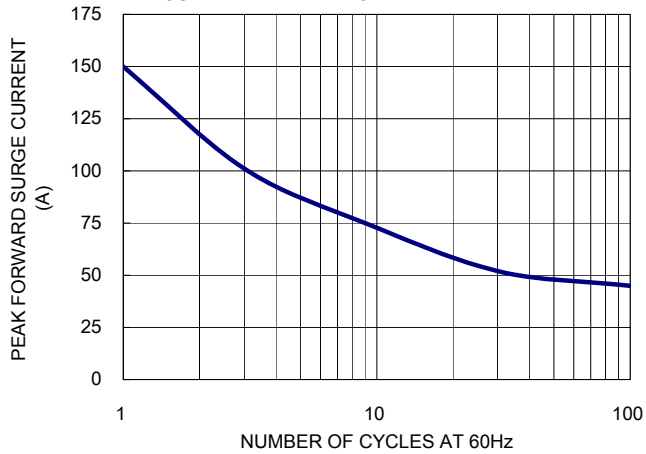


FIG. 4- TYPICAL JUNCTION CAPACITANCE

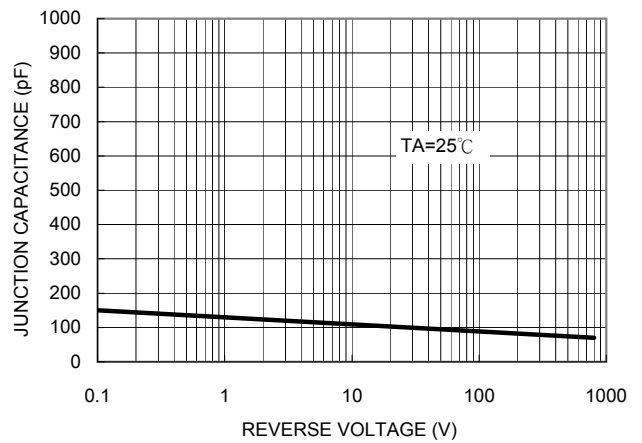


FIG. 5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

