



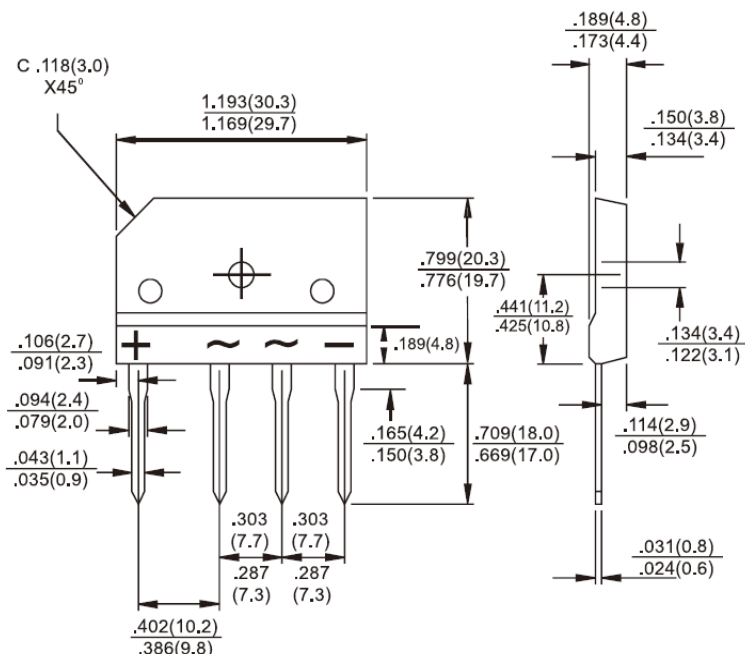
**RoHS**  
COMPLIANCE



### TS-6P

### Features

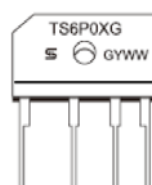
- ✧ UL Recognized File # E-326243
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ High case dielectric strength of 2000V<sub>RMS</sub>
- ✧ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✧ Typical IR less than 0.1 uA
- ✧ High surge current capability 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	$V_{RRM}$	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 @ $T_C=110^\circ C$	$I_{F(AV)}$	6							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	150							A
Rating of fusing ( $t < 8.3ms$ )	$I^2t$	93							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage (Note 1) @ 3 A @ 6 A	$V_F$	1.0 1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	$I_R$	10 500							$\mu A$ $\mu A$
Typical Junction Capacitance Per Leg (Note 2)	$C_j$	53							pF
Typical Thermal Resistance	$R_{\theta JC}$	1.8							$^\circ C/W$
Operating Temperature Range	$T_J$	- 55 to + 150							$^\circ C$
Storage Temperature Range	$T_{STG}$	- 55 to + 150							$^\circ C$

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

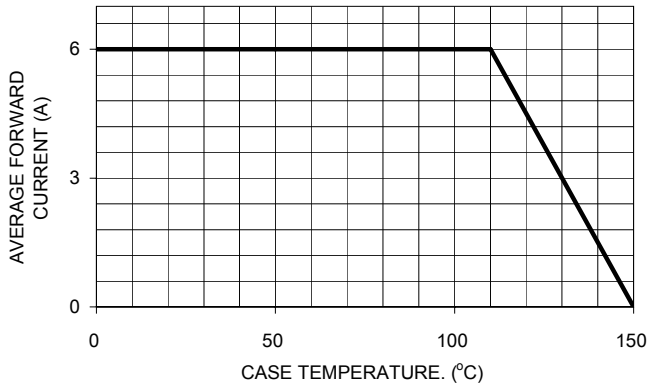


FIG. 2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

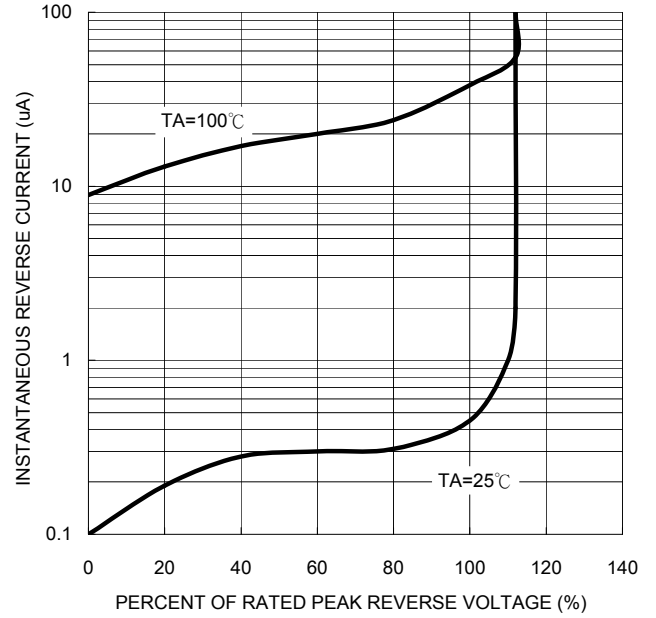


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

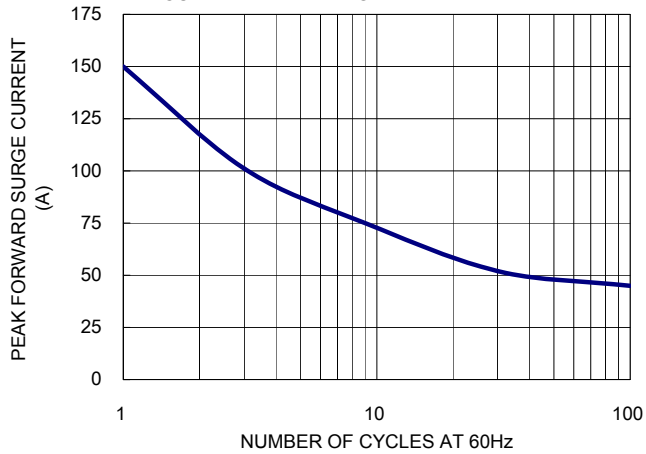


FIG. 4- TYPICAL JUNCTION CAPACITANCE

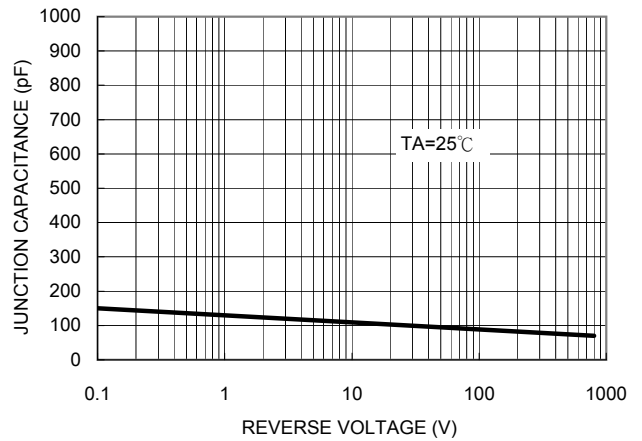


FIG. 5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

