



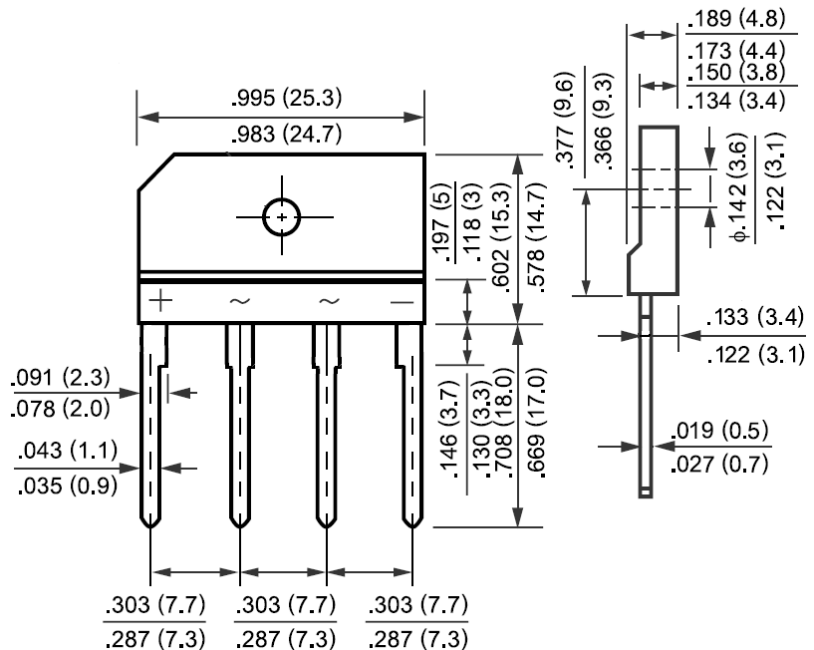
# TS6K40 - TS6K100

## Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers

### TS4K

### Features

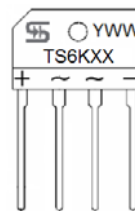
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✧ Surge overload rating to 150 amperes peak
- ✧ High case dielectric strength of 2000V<sub>RMS</sub>
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds / 0.375"(9.5mm) lead length at 5 lbs (2.3kg) tension
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.



### Mechanical Data

- ✧ Case: Molded plastic
- ✧ Terminals: Leads solderable per MIL-STD-750, Method 2026
- ✧ Weight: 4 grams
- ✧ Mounting torque : 5 in. lbs. Max.

### Dimensions in inches and (millimeters)



### Marking Diagram

- TS6KXX = 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	TS6K40	TS6K60	TS6K80	TS6K100	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	6				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	150				A
Maximum Instantaneous Forward Voltage @ 3 A (Note 1) @ 6 A	$V_F$	1.0 1.1				V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	5 500				$\mu\text{A}$ $\mu\text{A}$
Typical Thermal Resistance	$R_{\theta JC}$	3				$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	- 55 to + 150				$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 55 to + 150				$^\circ\text{C}$

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

## RATINGS AND CHARACTERISTIC CURVES (TS6K40 THRU TS6K100)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

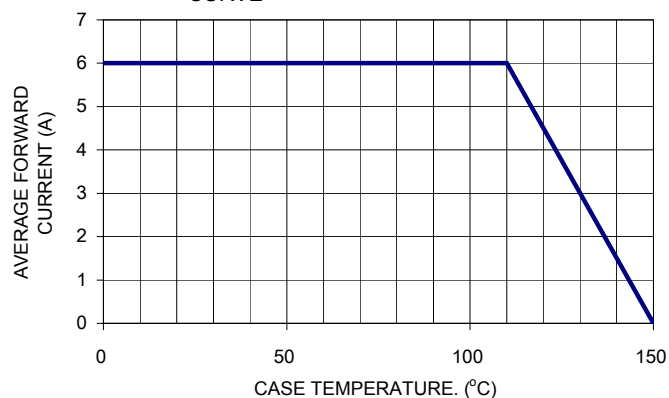


FIG. 2- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

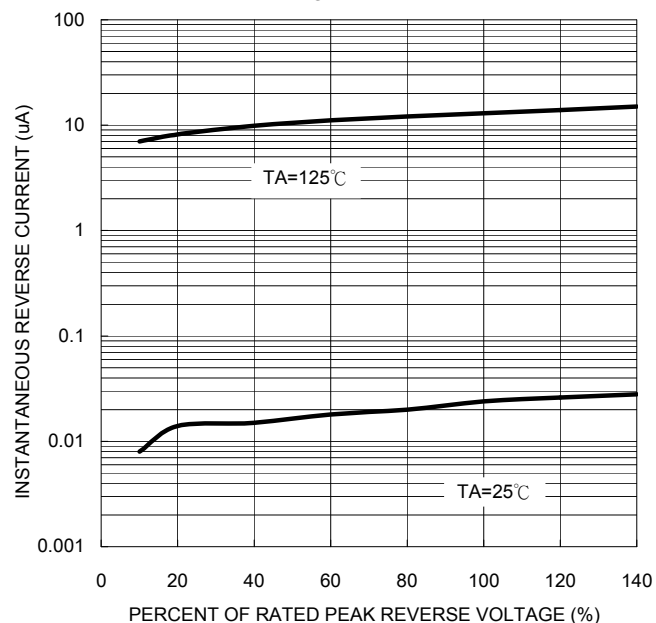


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

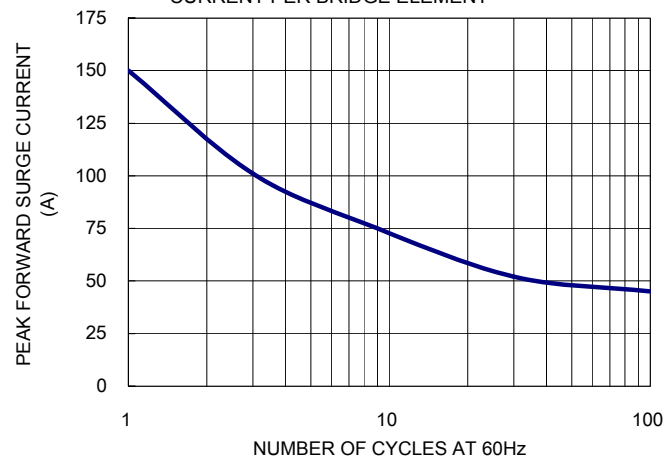


FIG. 4- TYPICAL JUNCTION CAPACITANCE

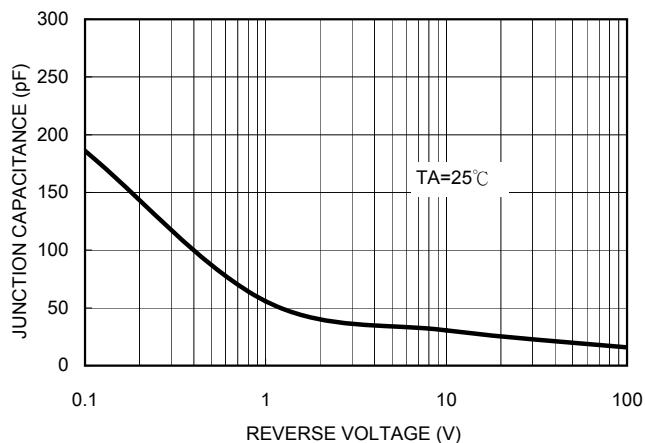


FIG. 5- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

