



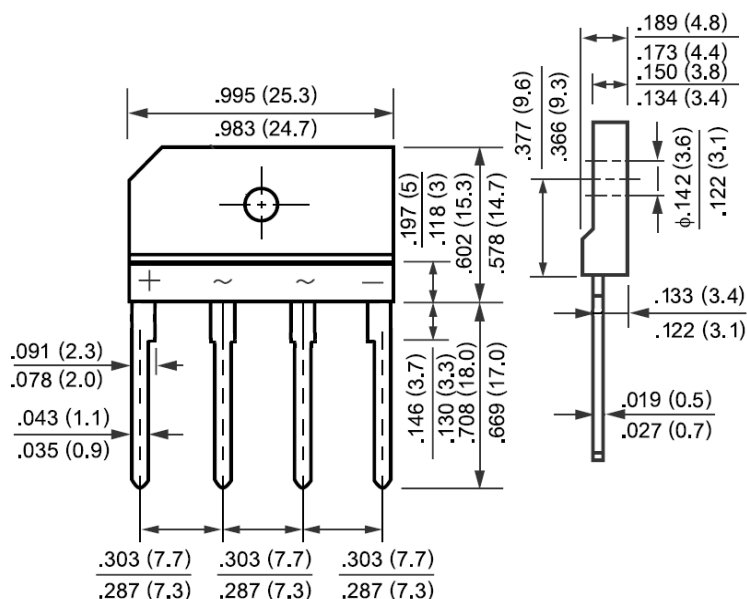
## TS10K40 - TS10K100

Single Phase 10.0 AMPS. Glass Passivated Bridge Rectifiers

### TS4K

### Features

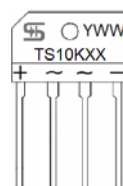
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ Plastic material has Underwriters laboratory Flammability Classification 94V-0
- ✧ Surge overload rating to 150 amperes peak
- ✧ High case dielectric strength of 2000V<sub>RMS</sub>
- ✧ Isolated voltage from case to lead over 2500 volts
- ✧ 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

TS10KXX	= 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	TS10K40	TS10K60	TS10K80	TS10K100	Unit
Maximum Repetitive 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	$I_{F(AV)}$	10				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) @ 5 A @10 A	$V_F$	1.0 1.1				V
Maximum Reverse Current @ Rated VR $T_A=25\text{ }^{\circ}\text{C}$ $T_A=125\text{ }^{\circ}\text{C}$	$I_R$	10 500				uA
Typical Thermal Resistance	$R_{\theta JC}$	2.3				°C/W
Operating Temperature Range	$T_J$	- 55 to + 150				°C
Storage Temperature Range	$T_{STG}$	- 55 to + 150				°C

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

## RATINGS AND CHARACTERISTIC CURVES (TS10K40 THRU TS10K100)

FIG.1 FORWARD CURRENT DERATING CURVE

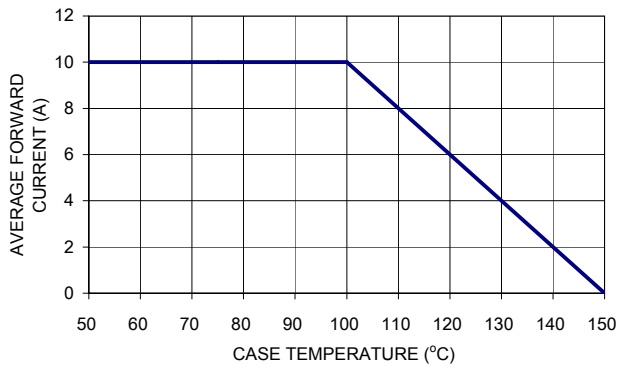


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

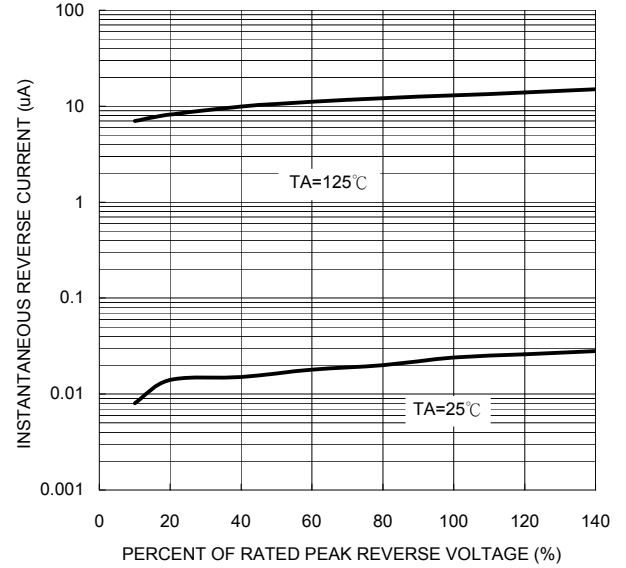


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

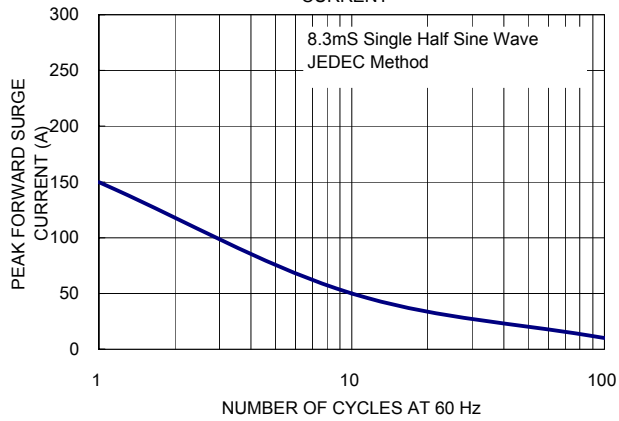


FIG. 5 TYPICAL FORWARD CHARACTERISRICS

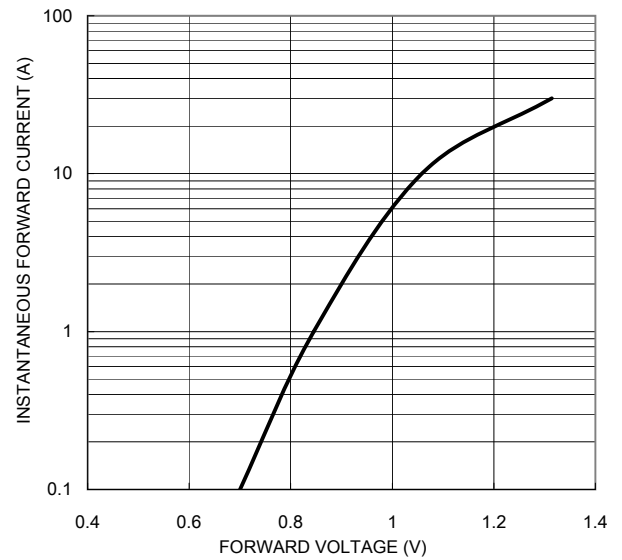


FIG. 4 TYPICAL JUNCTION CAPACITANCE

