



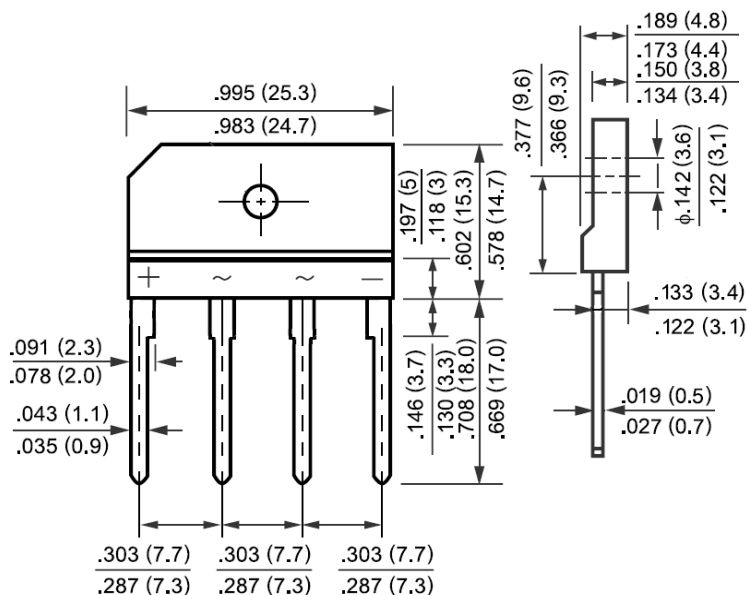
# TS10K40 - TS10K80

## Single Phase 10.0 AMPS. Glass Passivated Bridge Rectifiers

### TS4K

### Features

- ✧ UL Recognized File # E-326243.
- ✧ 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



- P/N = 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	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	400	600	800	V
Maximum RMS Voltage	V <sub>RMS</sub>	280	420	560	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	400	600	800	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	10			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) @ 5 A @ 10 A	V <sub>F</sub>	1.0 1.1			V
Maximum Reverse Current @ Rated VR T <sub>A</sub> =25 °C T <sub>A</sub> =125 °C	I <sub>R</sub>	10 500			uA
Typical Thermal Resistance	R <sub>θJC</sub>	2.3			°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

## RATINGS AND CHARACTERISTIC CURVES (TS10K40 THRU TS10K80)

FIG.1 FORWARD CURRENT DERATING CURVE

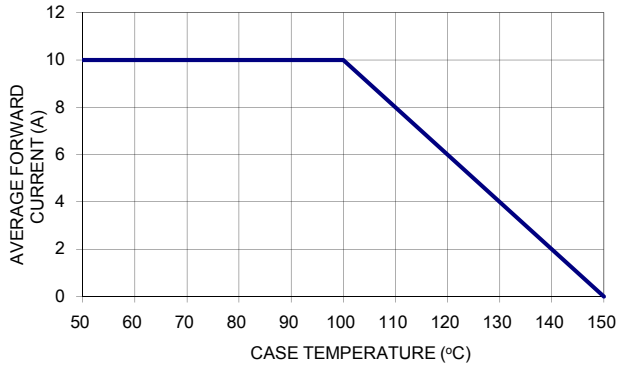


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

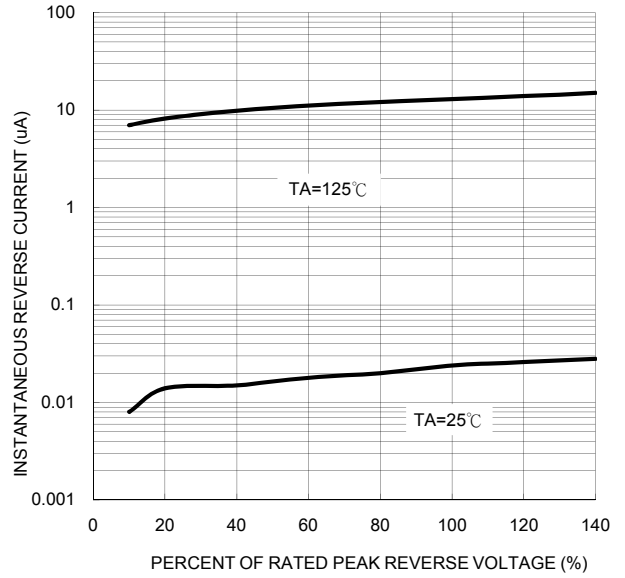


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

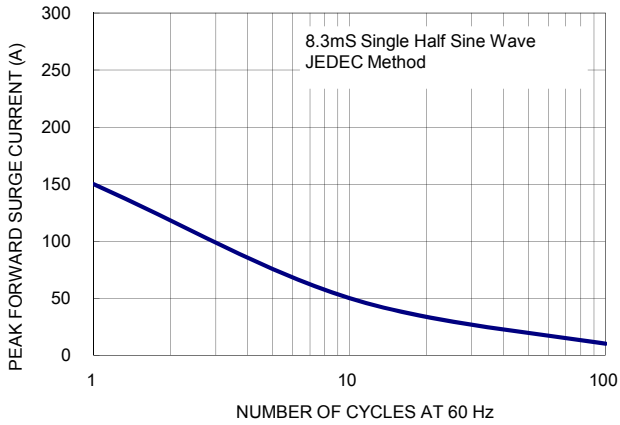


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

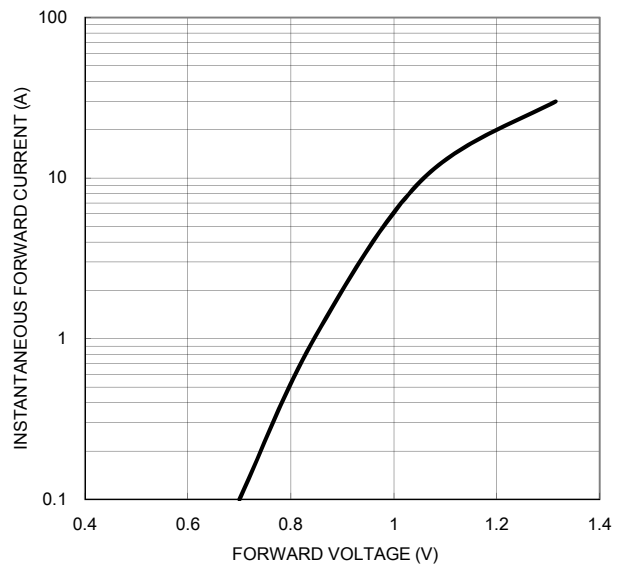


FIG. 4 TYPICAL JUNCTION CAPACITANCE

