



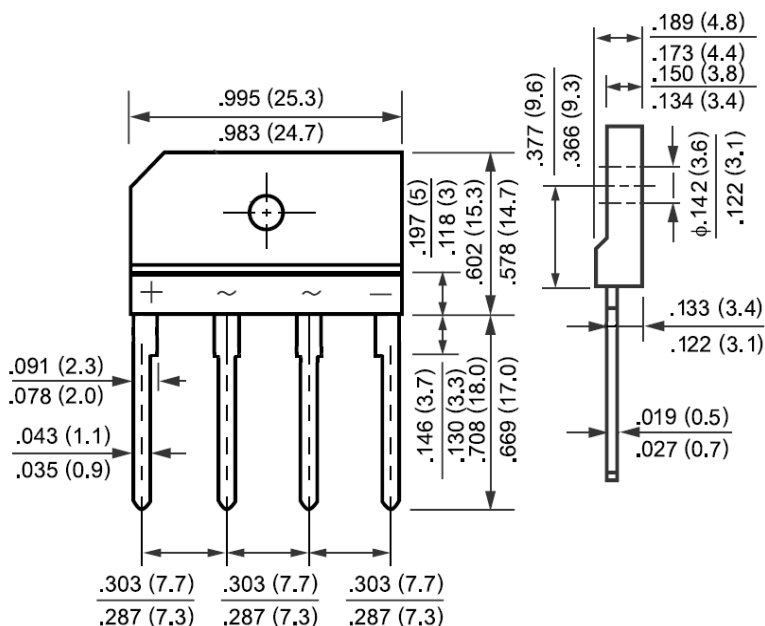
TS4K40 - TS4K100

Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers

TS4K

Features

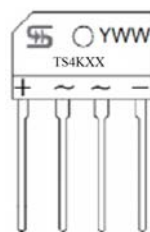
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ Plastic material has Underwriters laboratory Flammability Classification 94V-0
- ✧ Surge overload rating to 120 amperes peak
- ✧ High case dielectric strength of 2000V_{RMS}
- ✧ High temperature soldering 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
- ✧ Weight: 4 grams
- ✧ Mounting torque : 5 in-lbs Max.

Dimensions in inches and (millimeters)



Marking Diagram

- TS4KXXX = 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	TS4K40	TS4K60	TS4K80	TS4K100	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	$I_{F(AV)}$	4				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	120				A
Rating of fusing ($t < 8.3ms$)	I^2t	60				A ² S
Maximum Instantaneous Forward Voltage @ 2 A (Note 1) @ 4 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				μA μA
Typical Thermal Resistance	$R_{\theta JC}$	5.5				$^\circ C/W$
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

RATINGS AND CHARACTERISTIC CURVES (TS4K40 THRU TS4K100)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING
CURVE PER BRIDGE ELEMENT

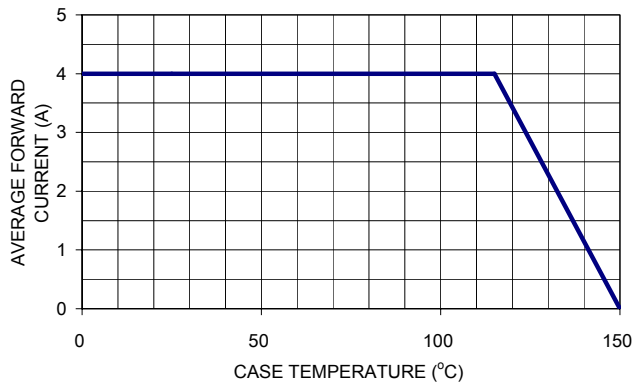


FIG. 2- TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

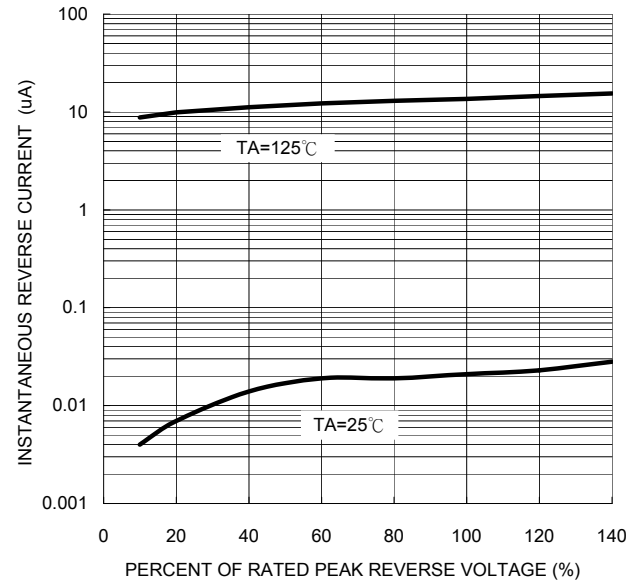


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE
CURRENT PER BRIDGE ELEMENT

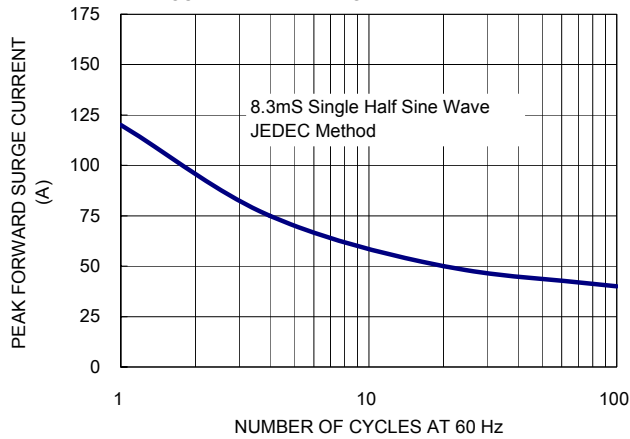


FIG. 4- TYPICAL JUNCTION CAPACITANCE

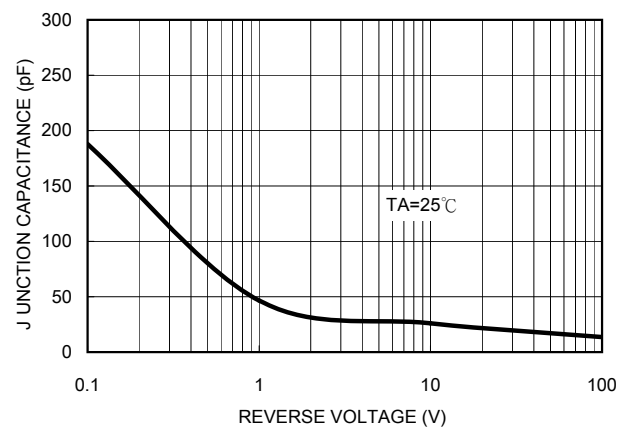


FIG. 5- TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

