25A Single-phase Glass-passivated Bridge Rectifier

Voltage Range 50 to 1000 Volts

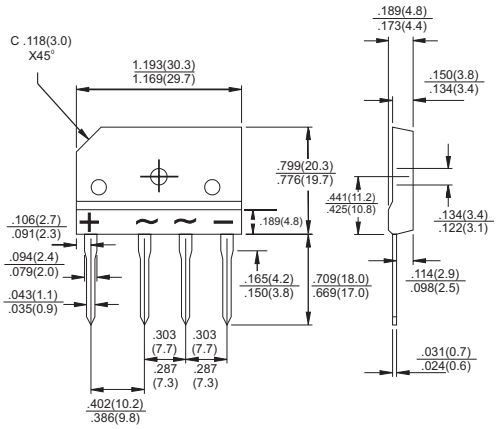
FEATURES

- UL Recognized File # E-96005
- 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 300 amperes peak
- High case dielectric strength of 2000 V_{RMS}

MECHANICAL DATA

- Case: Molded plastic
- Terminals: Leads solderable per MIL-STD-750, method 2026
- Weight: 0.3 ounce, 8 grams
- Mounting torque: 8.17 in. lbs. max.

TS-6P



Dimensions in inches and (millimeters)

RoHS compliant.

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%

Parameter	Symbol	TS25P 01G	TS25P 02G	TS25P 03G	TS25P 04G	TS25P 05G	TS25P 06G	TS25P 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 See Fig. 1	$I_{(AV)}$	25.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	300							A
Maximum Instantaneous Forward Voltage @25A	V_F	1.1							V
Maximum DC Reverse Current @ T_A=25°C at Rated DC Blocking Voltage @ T_A=125°C	I_R	10.0 500							uA uA
Typical Thermal Resistance (Note)	$R\theta_{JC}$	0.6							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to + 150							°C

Note: Thermal resistance from junction to case with device mounted on 5" x 7" x 0.25" Al-plate heatsink.

RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

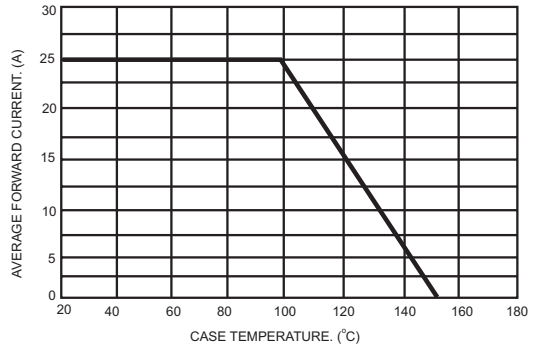


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

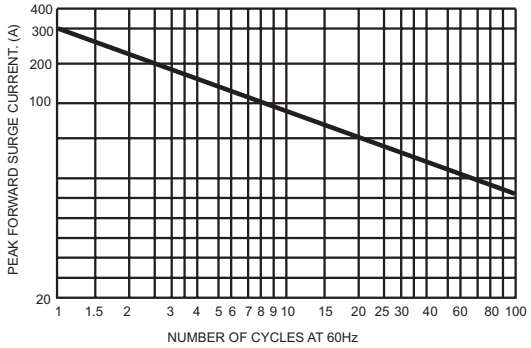


FIG.3- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

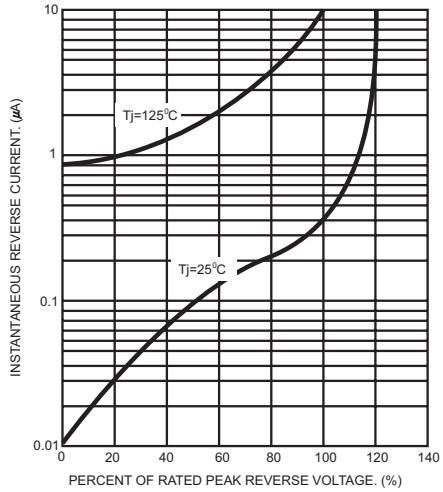


FIG.4- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT