

SF3008PT





Features

- ♦ Dual rectifier construction, positive center-tap
- ♦ Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- ♦ Glass passivated chip junctions
- ♦ Superfast recovery time, high voltage
- ♦ Low forward voltage, high current capability
- ♦ Low thermal resistance
- ♦ Low power loss, high efficiency
- ♦ High temperature soldering guaranteed: 260°C/10 seconds, 0.16",(4.06mm) lead lengths at 5 lbs., (2.3kg) tesion
- Green compound with suffix "G" on packing code & prefix "G" on datecode

Mechanical Data

- ♦ Case: JEDEC TO-3P/TO-247AD molded plastic
- ♦ Terminals: Pure tin plated, lead free, solderable per MIL-STD-705, Method 2026
- ♦ Polarity: As marked
- ♦ Mounting position: Any
- ♦ Weight: 5.6 grams

Maximum Ratings and Electrical Characteristics

Rating at 25 $^{\circ}$ 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	SF3008PT	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	600	V
Maximum RMS Voltage	V _{RMS}	420	V
Maximum DC Blocking Voltage	V _{DC}	600	V
Maximum Average Forward Rectified Current @T_c=100 $^\circ\!$	I _{F(AV)}	30	А
Peak Forward Surge Current, 8.3 ms Single Half Sine- wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	300	А
Maximum Instantaneous Forward Voltage @ 15A	V _F	1.7	V
Maximum Reverse Current @ Rated VR $T_A=25 \degree$ C(Note 1)T A=125 \degreeC	I _R	10 500	uA
Maximum Reverse Recovery Time (Note 2)	Trr	50	nS
Typical Junction Capacitance (Note 3)	Cj	175	pF
Typical Thermal Resistance (Note 4)	R _{θjC}	2.5	°C/W
Operating Temperature Range	TJ	- 55 to + 150	°C
Storage Temperature Range	T _{STG}	- 55 to + 150	°C

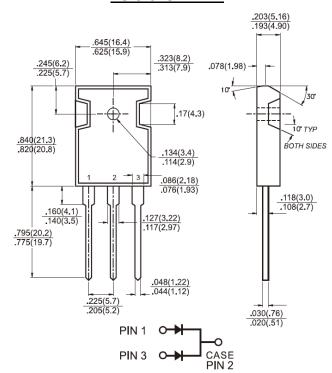
Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions: I_F =0.5A, I_R =1.0A, I_{RR} =0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

Note 4: Mount on 4" x 6" x 0.25" Al-Plate

30.0AMPS. Glass Passivated Super Fast Rectifiers TO-3P/TO-247AD



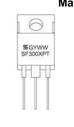
Dimensions in inches and (millimeters) Marking Diagram

G

Y

ww

SF300XPT



= Specific Device Code

- = Green Compound
- = Year
- = Work Week



RATINGS AND CHARACTERISTIC CURVES (SF3008PT)

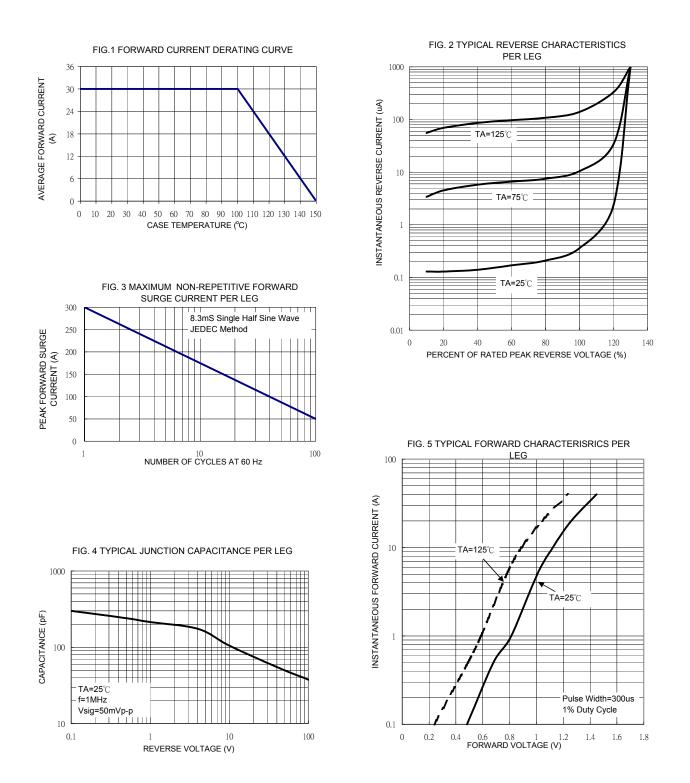


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

