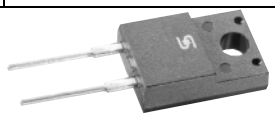
SFAF504G

Isolation 5.0 AMPS. Glass Passivated Super Fast Rectifiers



Voltage Range
200 Volts
Current
5.0 Amperes

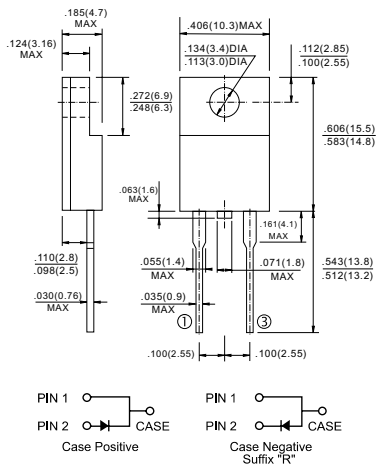
Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

Mechanical Data

- ✧ Case: ITO-220AC molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 250°C/10 seconds .16",(4.06mm) from case.
- ✧ Weight: 2.24 grams

ITO-220AC



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

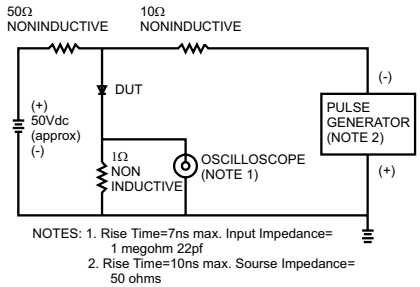
Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	SFAF504G	Units
Maximum Recurrent Peak Reverse Voltage	200	V
Maximum RMS Voltage	140	V
Maximum DC Blocking Voltage	200	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @T_C = 100℃	5.0	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	125	A
Maximum Instantaneous Forward Voltage @ 5.0A	0.975	V
Maximum DC Reverse Current @ T_A=25℃ at Rated DC Blocking Voltage @ T_A=100℃	10.0 400	uA uA
Maximum Reverse Recovery Time (Note 1)	35	nS
Typical Junction Capacitance (Note 2)	70	pF
Typical Thermal Resistance RθJC (Note 3)	5.0	℃/W
Operating Temperature Range T_J	-65 to +150	℃
Storage Temperature Range T_{STG}	-65 to +150	℃

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
3. Thermal Resistance from Junction to Case Mounted on Heatsink.

RATINGS AND CHARACTERISTIC CURVES (SFAF504G)

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance= 1 megohm 22pf
2. Rise Time=10ns max. Sourse Impedance= 50 ohms

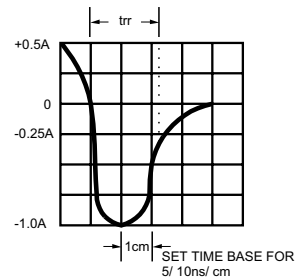


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

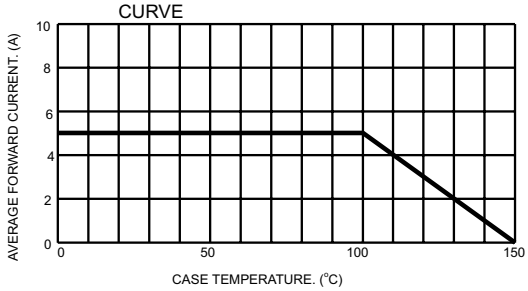


FIG.3- TYPICAL REVERSE CHARACTERISTICS

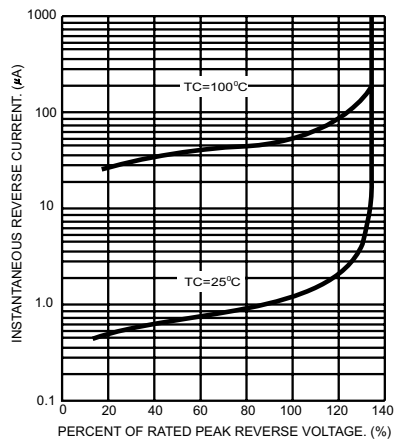


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

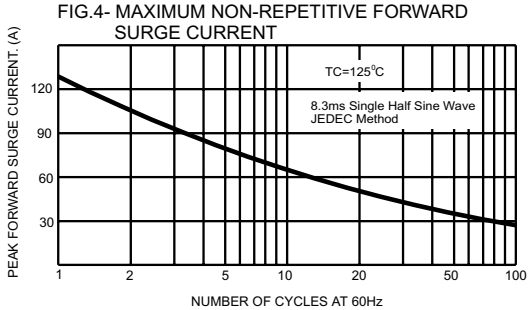


FIG.5- TYPICAL JUNCTION CAPACITANCE

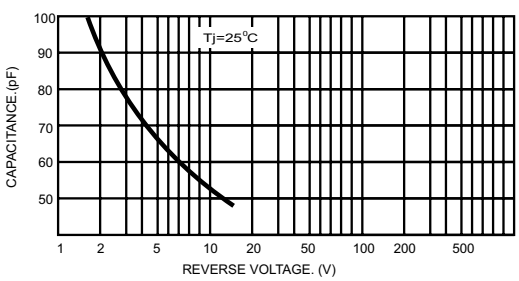


FIG.6- TYPICAL FORWARD CHARACTERISTICS