

SFF501G - SFF508G

Isolated 5.0 AMPS.

Glass Passivated Super Fast Rectifiers

ITO-220AB

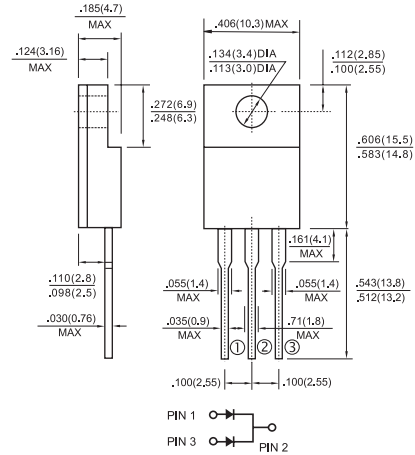


Features

- ✦ High efficiency, low VF
- ✦ High current capability
- ✦ High reliability
- ✦ High surge current capability
- ✦ Low power loss.
- ✦ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application

Mechanical Data

- ✦ Case: ITO-220AB molded plastic
- ✦ Epoxy: UL 94V-0 rate flame retardant
- ✦ Terminals: Pure tin plated, lead free. solderable per MIL-STD-202, Method 208 guaranteed
- ✦ Polarity: As marked
- ✦ High temperature soldering guaranteed: 260°C/10 seconds 0.25", (6.35mm) from case.
- ✦ Weight: 2.24 grams
- ✦ Mounting torque: 5 in – 1bs. max.



Dimensions in inches and (millimeters)

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	SFF 501G	SFF 502G	SFF 503G	SFF 504G	SFF 505G	SFF 506G	SFF 507G	SFF 508G	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_c = 100^\circ C$	$I_{(AV)}$	5.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	70								A
Maximum Instantaneous Forward Voltage @2.5A	V_F	0.98			1.3		1.7			V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=100^\circ C$	I_R	10 400								μA μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	35								nS
Typical Junction Capacitance (Note 2)	C_j	70				50				pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	5.5								$^\circ C/W$
Operating Temperature Range	T_J	-65 to +150								$^\circ C$
Storage Temperature Range	T_{STG}	-65 to +150								$^\circ C$

- 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. Mounted on Heatsink Size of 2" x 3" x 0.25", Al-Plate.

RATINGS AND CHARACTERISTIC CURVES (SFF501G THRU SFF508G)

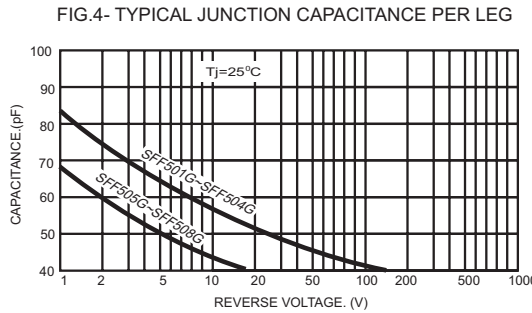
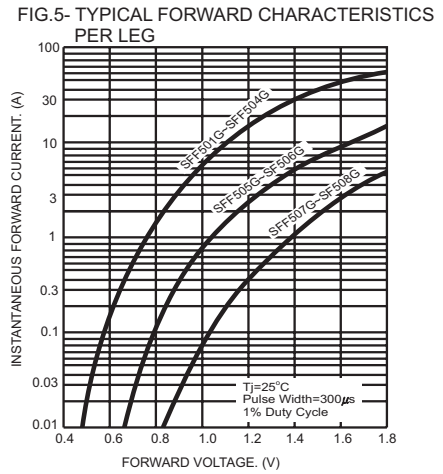
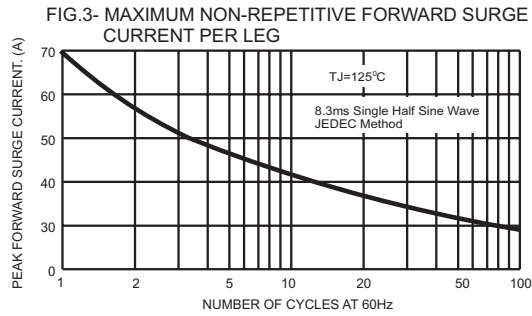
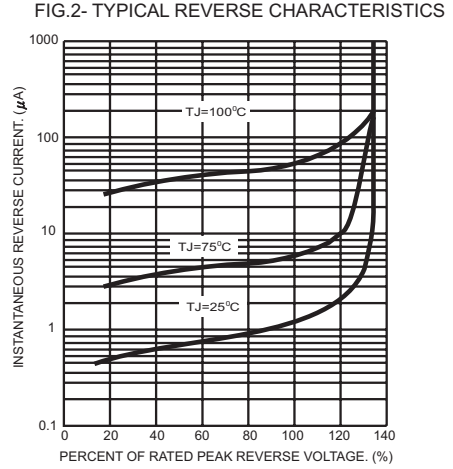
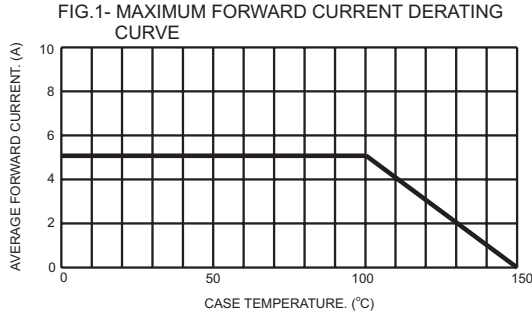


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

