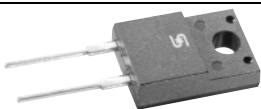




SFAF1601G THRU SFAF1608G

Isolation 16.0 AMPS. Glass Passivated Super Fast Rectifiers

Preliminary



Voltage Range
50 to 600 Volts
Current
16.0 Amperes

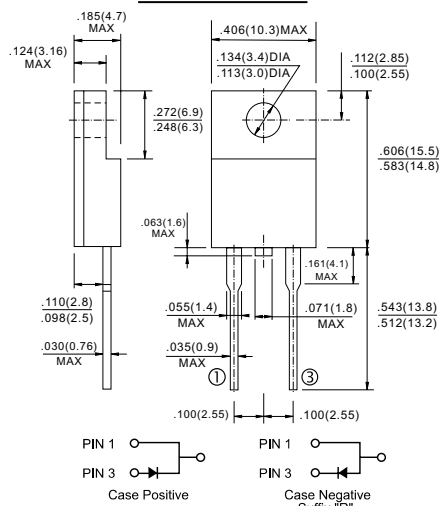
Features

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

Mechanical Data

- Cases: 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°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	SFAF 1601G	SFAF 1602G	SFAF 1603G	SFAF 1604G	SFAF 1605G	SFAF 1606G	SFAF 1607G	SFAF 1608G	Units
Maximum Recurrent Peak Reverse Voltage	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	50	100	150	200	300	400	500	600	V
Maximum Average Forward Rectified Current @T _C = 100°C	16.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	200								A
Maximum Instantaneous Forward Voltage @ 16.0A	0.975				1.3		1.7		V
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =100°C	10 400								uA uA
Maximum Reverse Recovery Time (Note 1)	35								nS
Typical Junction Capacitance (Note 2)	170				140				pF
Typical Thermal Resistance RθJC (Note 3)	3.0								°C/W
Operating Temperature Range T _J	-65 to +150								°C
Storage Temperature Range T _{STG}	-65 to +150								°C

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

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 (SFAF1601G THRU SFAF1608G)

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

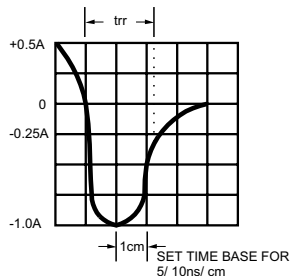
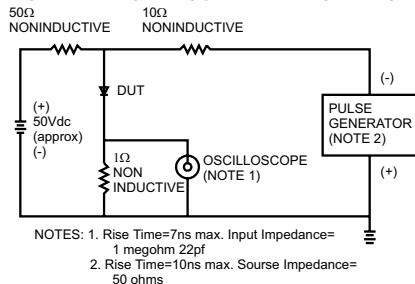


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

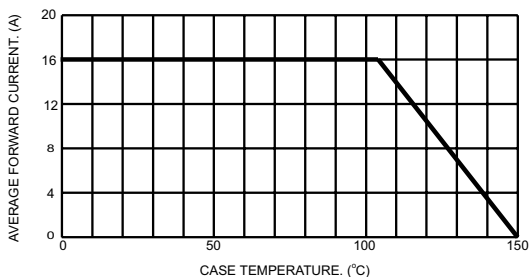


FIG.3- TYPICAL REVERSE CHARACTERISTICS

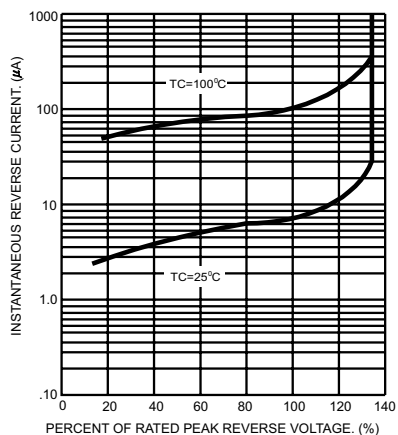


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

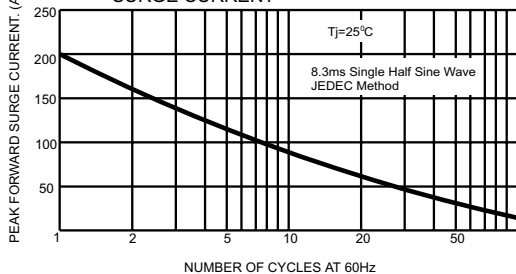


FIG.6- TYPICAL FORWARD CHARACTERISTICS

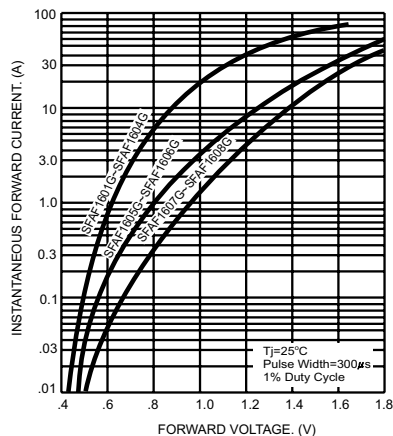


FIG.5- TYPICAL JUNCTION CAPACITANCE

