

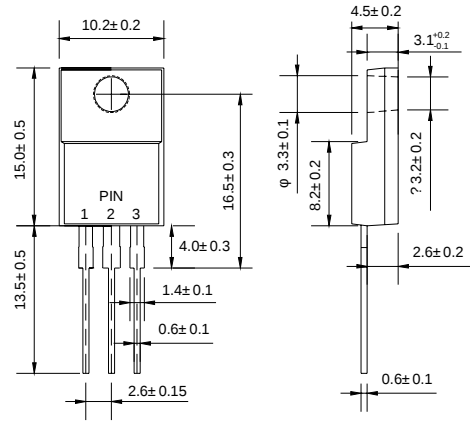


Features

- ◇ Low cost
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

Mechanical Data

- ◇ Case: JEDEC ITO-220AB, molded plastic
- ◇ Polarity: As marked
- ◇ Weight: 0.06 ounce, 1.67 grams
- ◇ Mounting position: Any



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

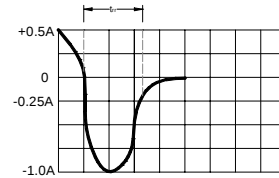
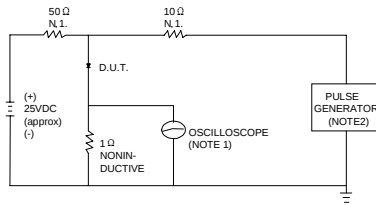
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		SF 1610FC	SF 1620FC	SF 1630FC	SF 1640FC	SF 1650FC	SF 1660FC	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	100	200	300	400	500	600	V
Maximum RMS voltage	V _{RMS}	70	140	210	280	350	420	V
Maximum DC blocking voltage	V _{DC}	100	200	300	400	500	600	V
Maximum average forward rectified current @T _C =100°C	I _{F(AV)}	16						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @T _J =125°C	I _{FSM}	125						A
Maximum instantaneous forward voltage @ 8.0A	V _F	0.98		1.3		1.7		V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =150°C	I _R	5.0 250		10 500				μ A
Maximum reverse recovery time (Note1)	t _{rr}	35						ns
Operating junction temperature range	T _J	- 55 ----- + 150						°C
Storage temperature range	T _{STG}	- 55 ----- + 150						°C

NOTE: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $t_{rr} = 0.25\text{A}$.

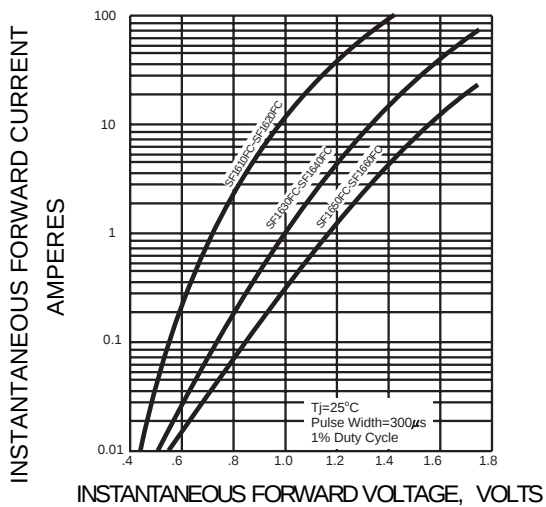
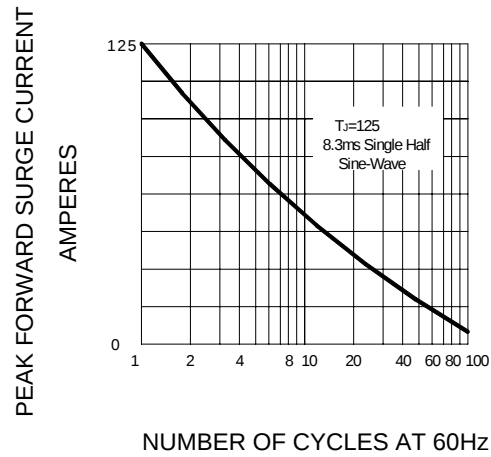
Ratings AND Characteristic Curves

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


SET TIME BASE FOR 15 ns/cm

NOTES: 1. RISE TIME = 7ns MAX. INPUT IMPEDANCE = 1MΩ, 22pF.

2. RISE TIME = 10ns MAX. SOURCE IMPEDANCE = 50 Ω.

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

FIG.3 – PEAK FORWARD SURGE CURRENT

FIG.4-FORWARD DERATING CURVE
