



SFF1008

Superfast Recovery Rectifiers

FEATURES

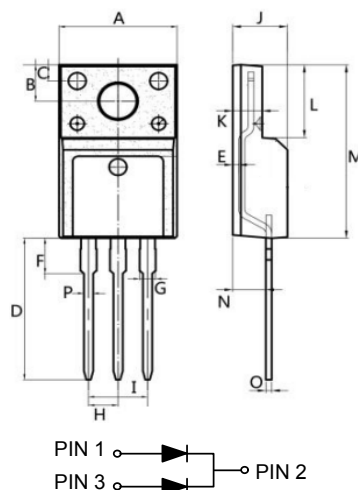
- Low profile package
- Low power losses, high efficiency
- Easy to pick and place
- High forward surge capability
- High temperature soldering : 260°C/10 seconds at terminals
- Lead free in comply with EU ROHS 2011/65/EU directives



Mechanical Data

- **Case** ITO-220AB
- **Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026
- **Polarity** : Cathode line denotes the cathode end
- **Mounting Position** : Any

ITO-220AB



Dim.	Min.	Max.
A	9.95	10.25
B	2.95	3.25
C	1.25	1.45
D	12.95	13.25
E	0.50	0.65
F	2.80	3.30
G	1.30	1.45
H	Typ2.54	
I	Typ5.08	
J	4.50	4.75
K	2.50	2.65
L	6.35	6.55
M	15.40	16.00
N	2.75	3.05
O	0.48	0.52
P	0.76	0.84
All Dimensions in millimeters		

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Type Number	Symbol	SFF1008	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	800	V
Maximum RMS Voltage	V_{RMS}	560	V
Maximum DC Blocking Voltage	V_{DC}	800	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_C = 100^\circ C$	$I_{(AV)}$	10	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150	A
Maximum Instantaneous Forward Voltage @ 5.0A	V_F	1.85	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	50	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	2.0	$^\circ C/W$
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.





Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

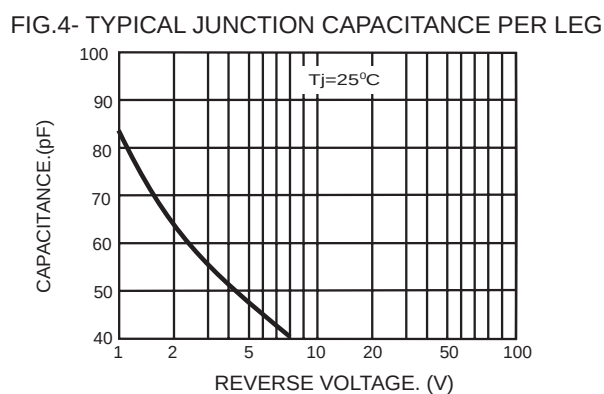
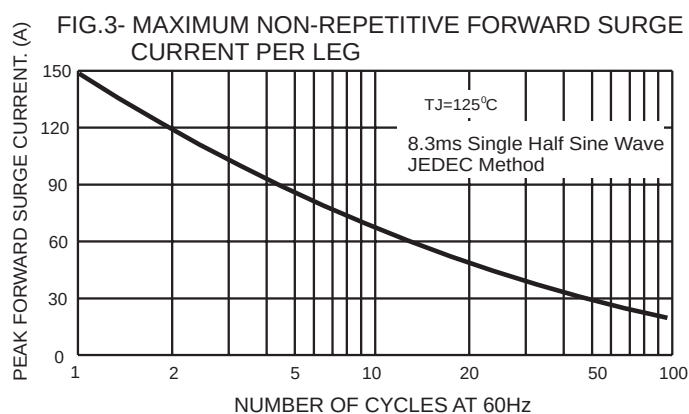
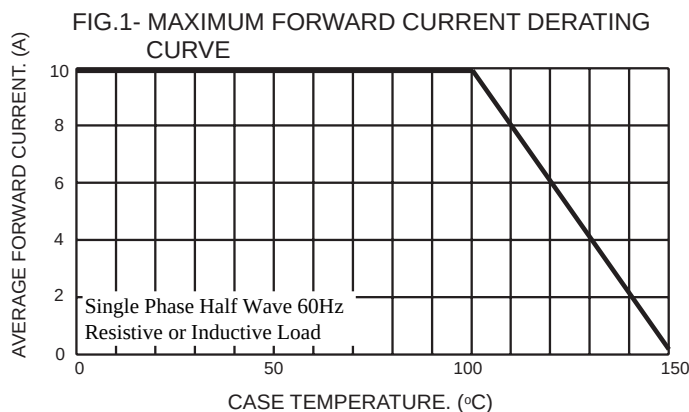


FIG.2- TYPICAL REVERSE CHARACTERISTICS

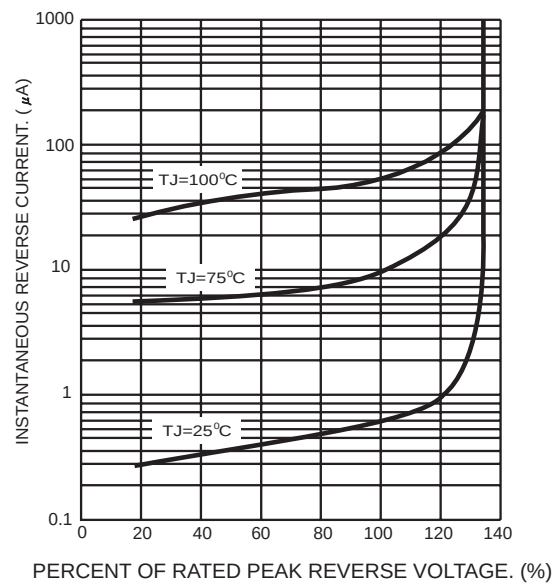


FIG.5- TYPICAL FORWARD CHARACTERISTICS PER LEG

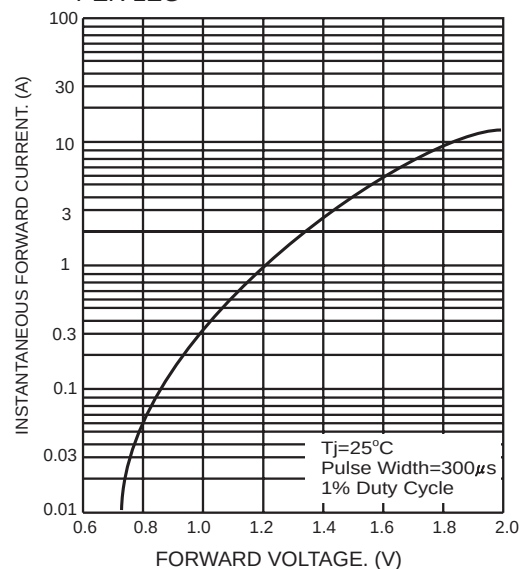


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

