

**FEATURES**

- ◆ Ultrafast 35 Nanosecond Recovery Time
- ◆ 150° C Operating Junction Temperature
- ◆ Popular ITO-220 & TO-220 Package
- ◆ Epoxy Meets UL94 ,V0 @ 1/8"
- ◆ High Temperature Glass Passivated Junction
- ◆ Low Forward Voltage
- ◆ Low Leakage Current
- ◆ Pb-Free Packages are Available

ITO-220AB**TO-220AB****MECHANICAL DATA**

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260° C Max. for 10 Seconds
- Shipped 50 units per plastic tube

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	SFF2004	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	V
Maximum RMS Voltage	V_{RMS}	280	V
Maximum DC Blocking Voltage	V_{DC}	400	V
Maximum Average Forward Rectified Current @ $T_C = 100^\circ\text{C}$	$I_{(AV)}$	20	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	170	A
Maximum Instantaneous Forward Voltage @ 10A	V_F	1.3	V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$	I_R	10 400	μA μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	35	nS
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.5	$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-65 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

- 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. Thermal Resistance from Junction to Case Mounted on Heatsink.



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

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

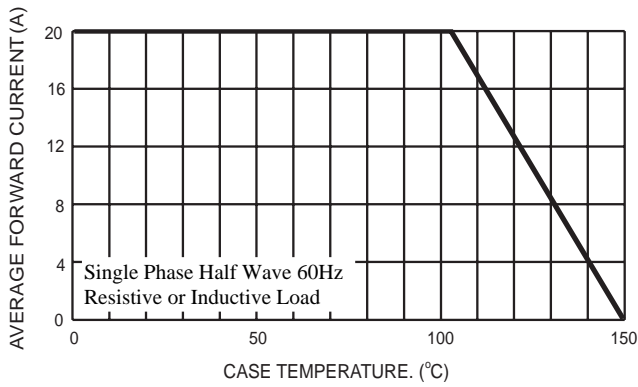


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

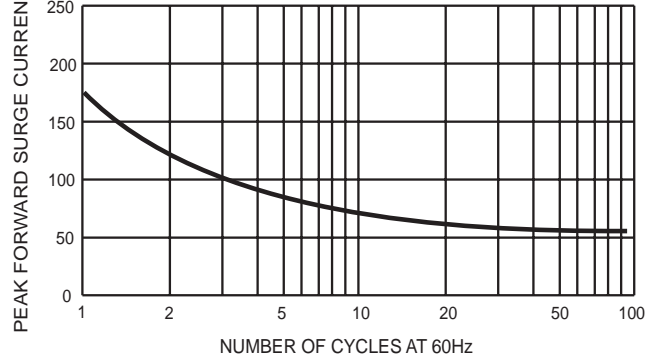


FIG.3- TYPICAL FORWARD CHARACTERISTICS PER LEG

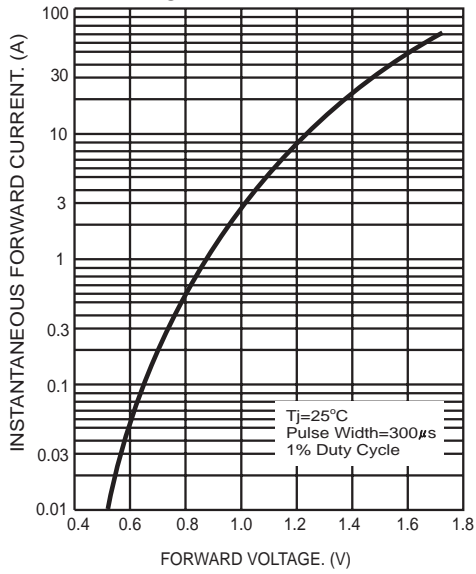
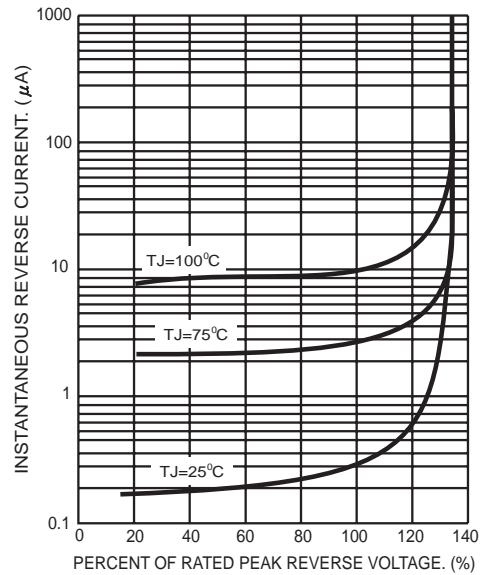


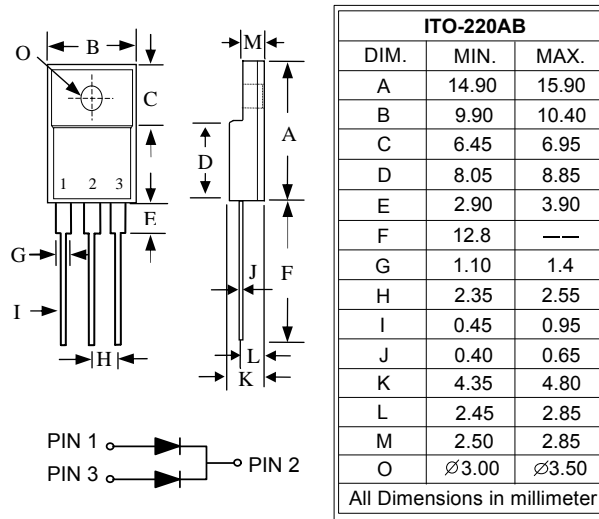
FIG.4- TYPICAL REVERSE CHARACTERISTICS





PACKAGE OUTLINE

ITO-220AB



TO-220AB

