

**SUPER FAST  
GLASS PASSIVATED RECTIFIERS**

REVERSE VOLTAGE - **300 to 400** Volts  
FORWARD CURRENT - **20** Amperes

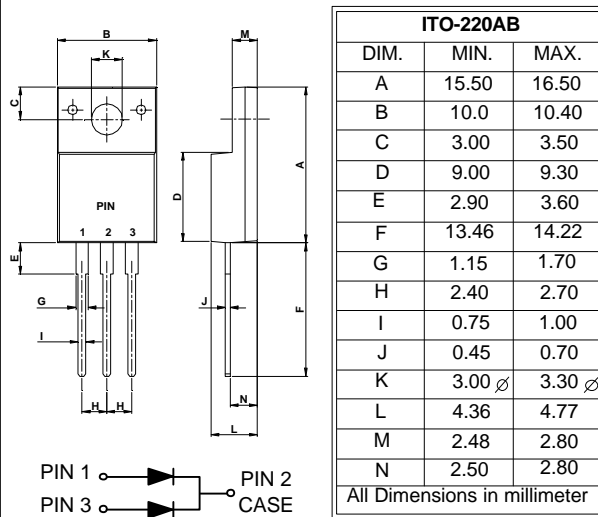
**FEATURES**

- Glass passivated chip
- Superfast switching time for high efficiency
- Low forward voltage drop and high current capability
- Low reverse leakage current
- High surge capacity
- Plastic package has UL flammability classification 94V-0

**MECHANICAL DATA**

- Case : ITO-220AB molded plastic
- Polarity : As marked on the body
- Weight : 0.06 ounces, 1.70 grams
- Mounting position : Any

**ITO-220AB**



**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%

CHARACTERISTICS	SYMBOL	STPF2030CT	STPF2040CT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	300	400	V
Maximum RMS Voltage	VRMS	210	280	V
Maximum DC Blocking Voltage	VDC	300	400	V
Maximum Average Forward Rectified Current @TC=100	I(AV)	20		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	IFSM	125		A
Maximum forward Voltage at IF=10A@TJ =25 Pulse width =300us 2% Duty cycle	VF	1.3 1.2 1.5 1.4		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ =25 @TJ =100	IR	10 500		uA
Typical Junction Capacitance per element (Note 1)	CJ	280		pF
Maximum Reverse Recovery Time (Note 2)	TRR	35		ns
Typical Thermal Resistance (Note 3)	RθJC	2		/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to +150		
Dielectric Strength from terminals to case, AC with t=1 minute, RH<30%	Vdis	2000		V

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2.Reverse Recovery Test Conditions:IF=0.5A,IR=1.0A,IRR 0.25A.  
3.Device mounted on 228 mm x 114 mm x 8 mm Al Plate.

FIG.1 - FORWARD CURRENT DERATING CURVE

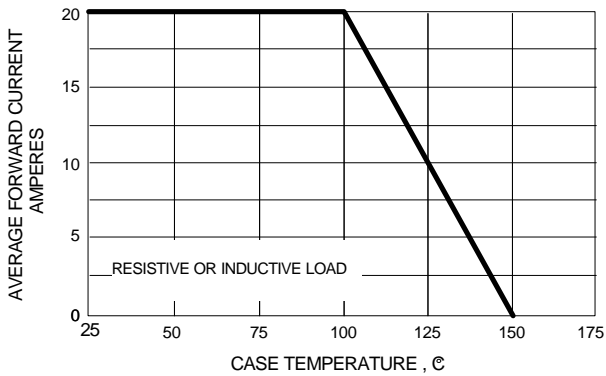


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

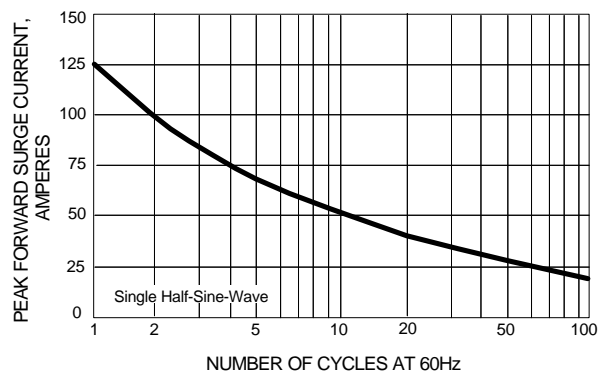


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

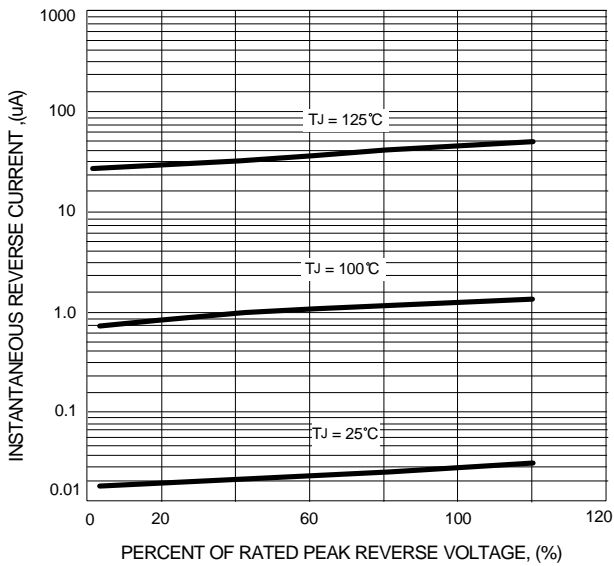


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

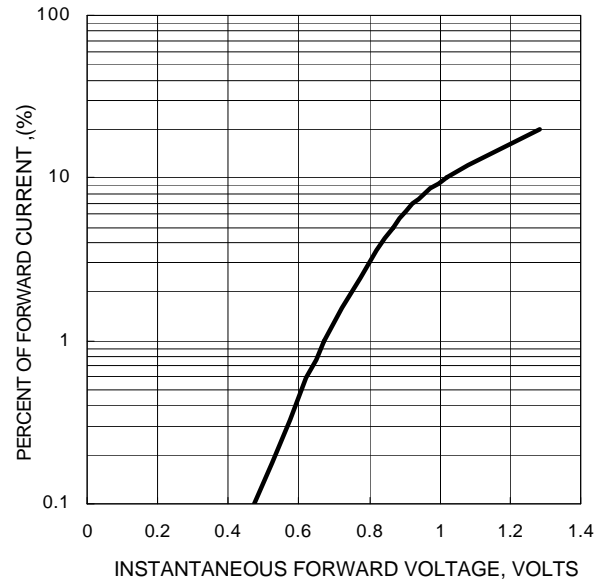


FIG.5 - TYPICAL JUNCTION CAPACITANCE

