

### FAST RECOVERY RECTIFIERS

VOLTAGE RANGE: 100 --- 600 V  
CURRENT: 10 A

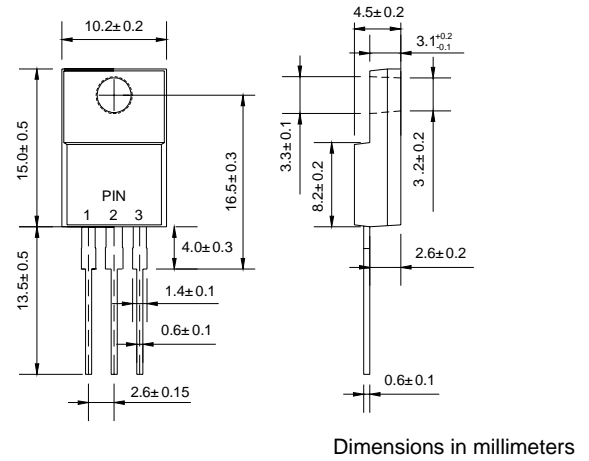
#### FEATURES

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

#### MECHANICAL DATA

- ◇ Case:JEDECITO-220AB,molded plastic
- ◇ Terminals: solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.071ounces,2.006 grams
- ◇ Mounting position: Any

#### ITO-220AB



#### 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%.

		FR 1010FC	FR 1020FC	FR 1030FC	FR 1040FC	FR 1060FC	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	100	200	300	400	600	V
Maximum RMS voltage	$V_{RMS}$	70	140	210	280	420	V
Maximum DC blocking voltage	$V_{DC}$	100	200	300	400	600	V
Maximum average forward rectified current @ $T_A=75^\circ\text{C}$	$I_{F(AV)}$	10					A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ\text{C}$	$I_{FSM}$	100					A
Maximum instantaneous forward voltage @ 5.0 A	$V_F$	1.3					V
Maximum reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	$I_R$	10 150					$\mu\text{A}$
Maximum reverse recovery time (Note1)	$t_{rr}$	150				250	ns
Typical junction capacitance (Note2)	$C_J$	28					pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	3.0					$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	- 55---- +150					$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55---- + 150					$^\circ\text{C}$

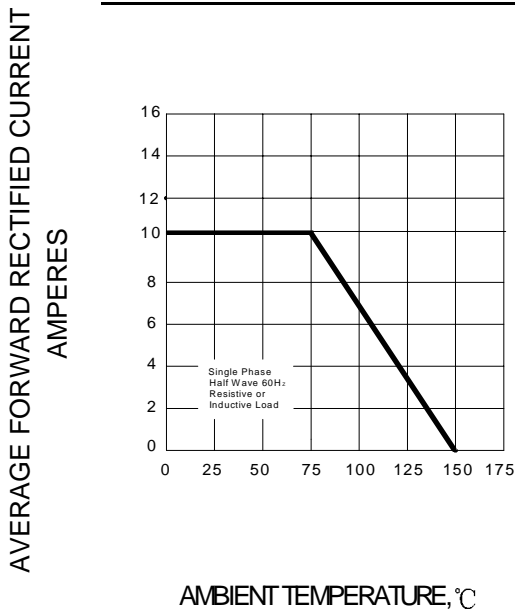
NOTE:1. Measured with  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{rr}=0.25\text{A}$ .

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

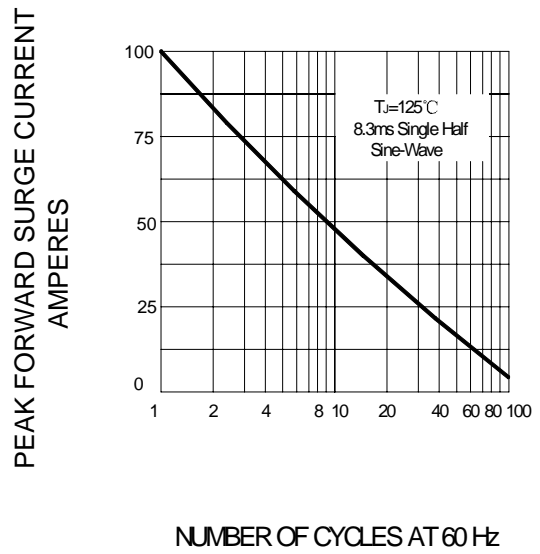
3. Thermal resistance from junction to ambient.

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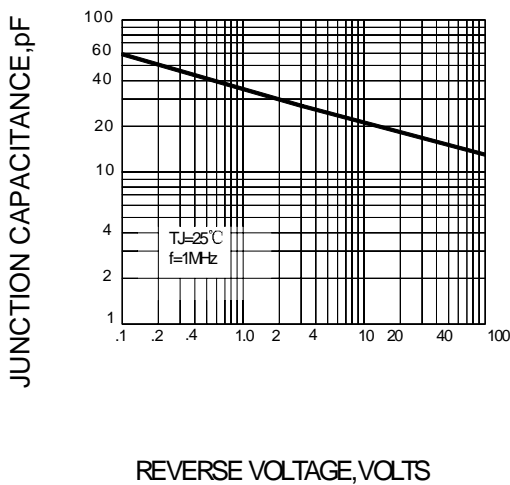
**FIG.1 – FORWARD DERATING CURVE**



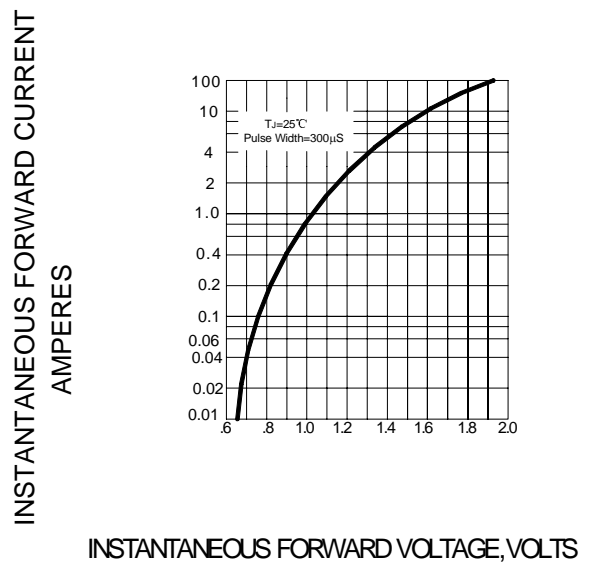
**FIG.2-PEAK FORWARD SURGE CURRENT**



**FIG.3-TYPICAL JUNCTION CAPACITANCE**



**FIG.4 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.5 – REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**

