

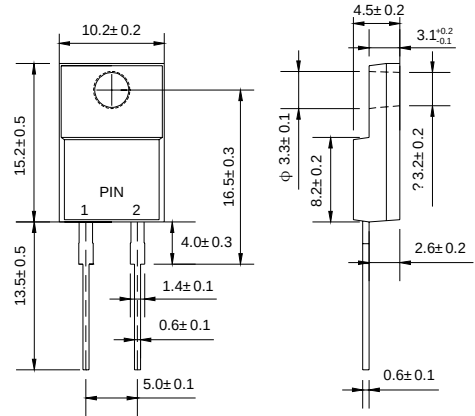
### ITO-220AC

### 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: JEDEC ITO-220AC, molded plastic
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.056 ounces, 1.587 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%.

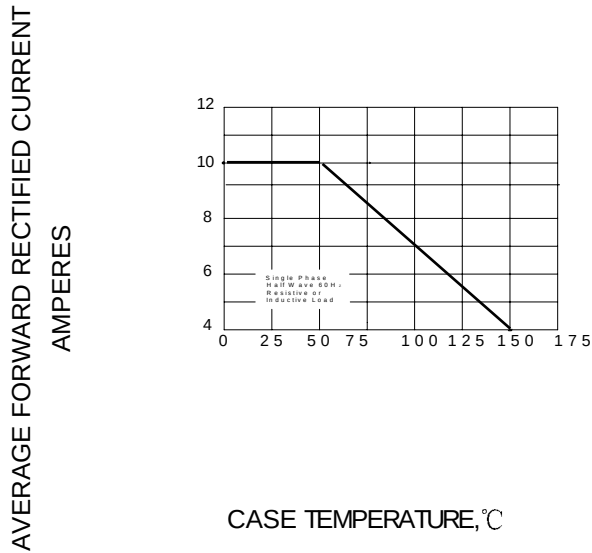
|                                                                                                                   |                 | 10A05F          | 10A10F | 10A20F | 10A40F | 10A60F | 10A80F | 10A100F | UNITS              |
|-------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|--------|--------|--------|--------|--------|---------|--------------------|
| Maximum recurrent peak reverse voltage                                                                            | $V_{RRM}$       | 50              | 100    | 200    | 400    | 600    | 800    | 1000    | V                  |
| Maximum RMS voltage                                                                                               | $V_{RMS}$       | 35              | 70     | 140    | 280    | 420    | 560    | 700     | V                  |
| Maximum DC blocking voltage                                                                                       | $V_{DC}$        | 50              | 100    | 200    | 400    | 600    | 800    | 1000    | V                  |
| Maximum average forward rectified current<br>9.5mm lead length, @ $T_c=50^\circ\text{C}$                          | $I_{F(AV)}$     | 10.0            |        |        |        |        |        |         | A                  |
| Peak forward surge current<br>8.3ms single half-sine-wave<br>superimposed on rated load @ $T_j=125^\circ\text{C}$ | $I_{FSM}$       | 400             |        |        |        |        |        |         | A                  |
| Maximum instantaneous forward voltage<br>@ 10 A                                                                   | $V_F$           | 1.0             |        |        |        |        |        |         | V                  |
| Maximum reverse current @ $T_A=25^\circ\text{C}$<br>at rated DC blocking voltage @ $T_A=100^\circ\text{C}$        | $I_R$           | 10<br>100       |        |        |        |        |        |         | $\mu\text{A}$      |
| Typical junction capacitance (Note1)                                                                              | $C_J$           | 120             |        |        |        |        |        |         | pF                 |
| Typical thermal resistance (Note2)                                                                                | $R_{\theta JC}$ | 10              |        |        |        |        |        |         | $^\circ\text{C/W}$ |
| Operating junction temperature range                                                                              | $T_J$           | - 55 ---- + 150 |        |        |        |        |        |         | $^\circ\text{C}$   |
| Storage temperature range                                                                                         | $T_{STG}$       | - 55 ---- + 150 |        |        |        |        |        |         | $^\circ\text{C}$   |

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

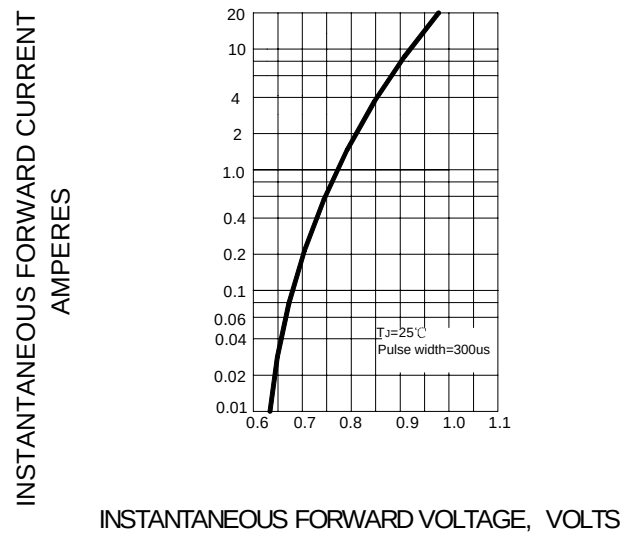
2. Thermal resistance from junction to case.

## Ratings AND Characteristic Curves

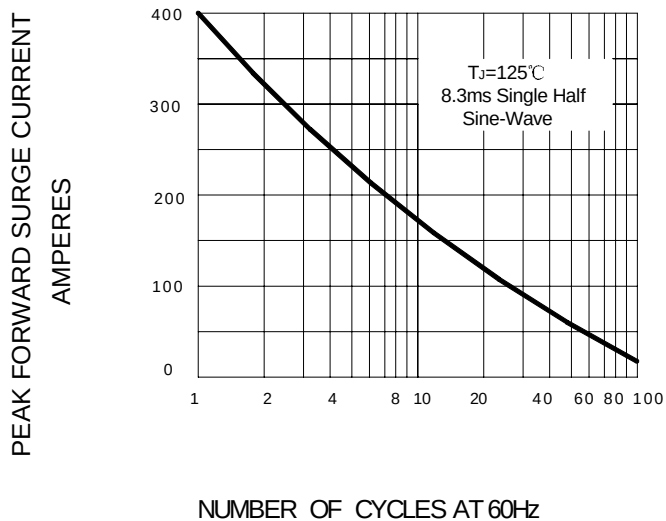
**FIG.1 – FORWARD DERATING CURVE**



**FIG.2 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.3 –MAXIMUM NON-REPETITIVE FORWARD  
SURGE CURRENT**



**FIG.4 – TYPICAL JUNCTION CAPACITANCE**

