

### PFC Circuit.

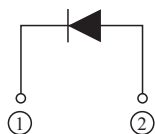
### FEATURES

- Ultra-Fast Recovery Time for High Efficiency.
- Low Forward Voltage Drop, High Current Capability, and Low Power Loss.
- Suffix U : Qualified to AEC-Q101.  
ex) U10A6CI-U/PU

### APPLICATION

- Switching Power Supply.
- Home Appliances, Office Equipment.
- Telecommunication, Factory Automation.

### POLARITY

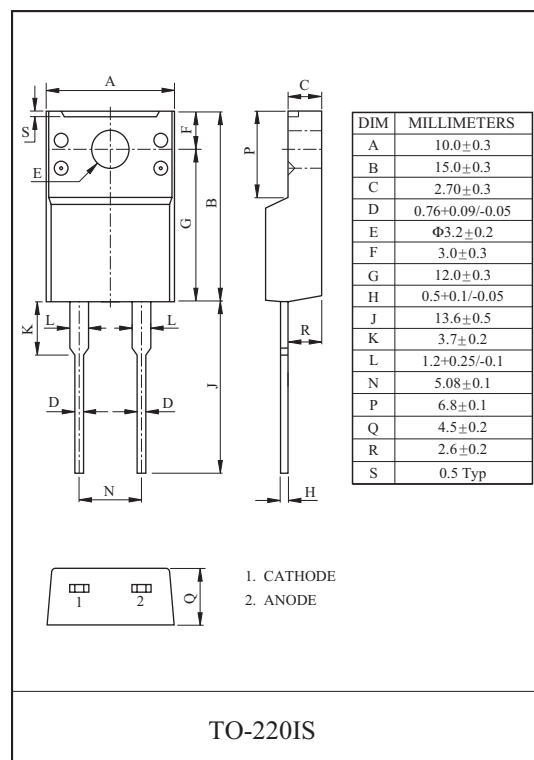


### MAXIMUM RATINGS (Ta=25 °C)

| CHARACTERISTIC                                                 | SYMBOL    | RATING  | UNIT |
|----------------------------------------------------------------|-----------|---------|------|
| Maximum Reverse Voltage                                        | $V_{RM}$  | 600     | V    |
| Average Output Rectified Current<br>(Tc=94 °C)                 | $I_O$     | 10      | A    |
| Peak One Cycle Surge Forward Current (Non-Repetitive, tp=10ms) | $I_{FSM}$ | 100     | A    |
| Junction Temperature                                           | $T_j$     | 150     |      |
| Storage Temperature Range                                      | $T_{stg}$ | -55~150 |      |

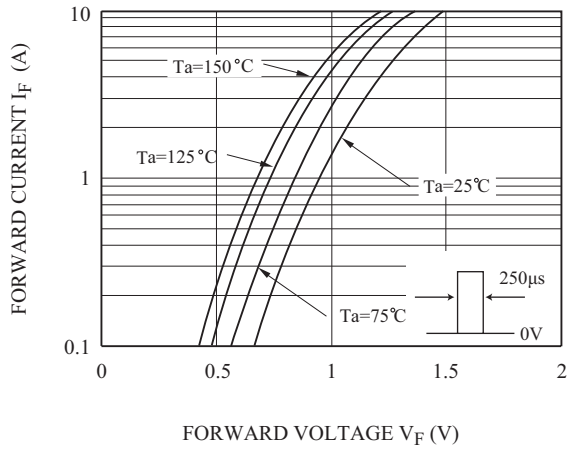
### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

| CHARACTERISTIC        | SYMBOL        | TEST CONDITION                        | MIN. | TYP. | MAX. | UNIT    |
|-----------------------|---------------|---------------------------------------|------|------|------|---------|
| Peak Forward Voltage  | $V_{FM}$      | $I_{FM}=10A$                          | -    | 1.5  | 2.0  | V       |
| Reverse Current       | $I_{RM}$      | $V_{RM}=600V$                         | -    | -    | 30   | $\mu A$ |
| Reverse Recovery Time | $t_{rr}$      | $I_F=1.0A, V_R=30V, di/dt=-50A/\mu s$ | -    | 24   | 35   | ns      |
| Thermal Resistance    | $R_{th(j-c)}$ | Junction to Case                      | -    | -    | 5.0  | /W      |

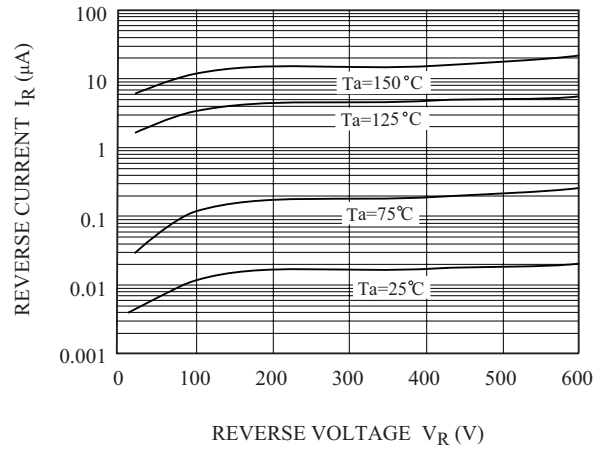


# U10A6CI

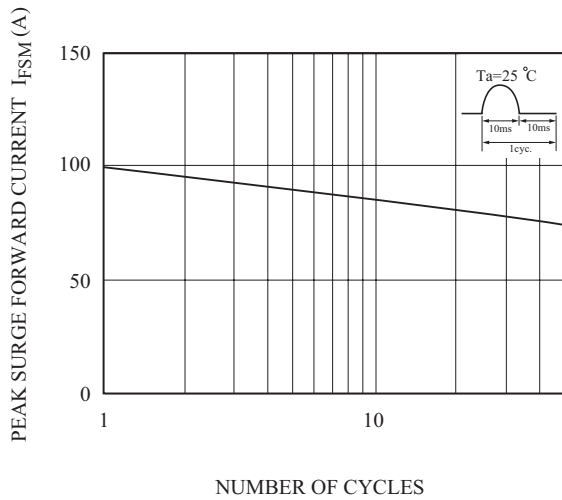
$I_F - V_F$



$I_R - V_R$



$I_{FSM} - \text{CYCLE CHARACTERISTICS}$



$P_D - T_C$

