

Ultrafast Rectifier
YG975C6R
FEATURES

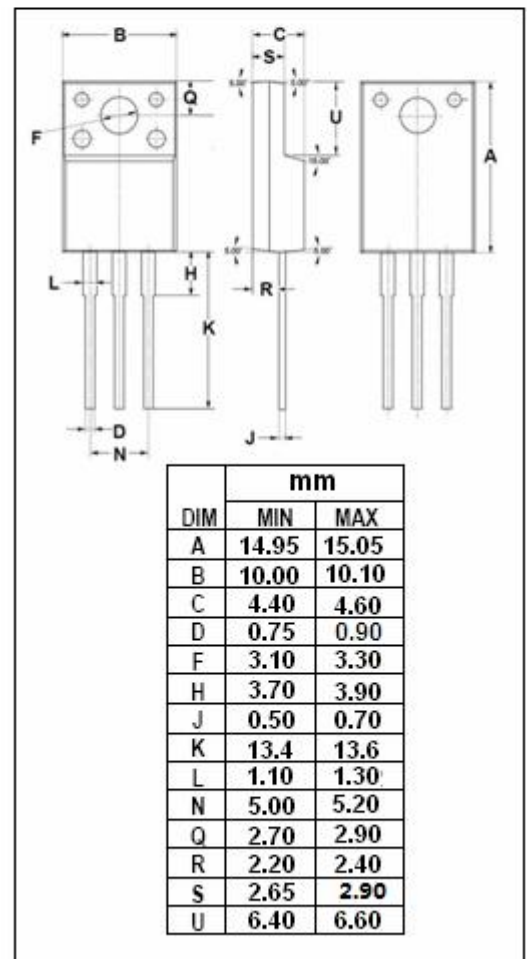
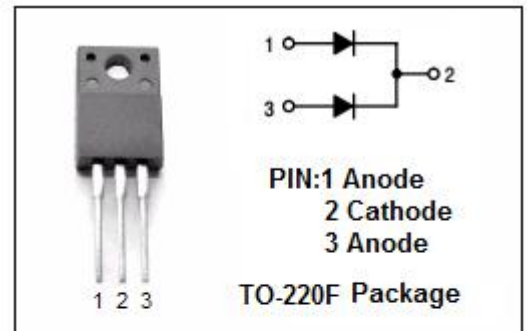
- Ultrafast with soft recovery
- 150°C Operating temperature
- Popular TO-220F package
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Power switching circuits
- General purpose

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--|--|---------|------|
| V _{RRM} V _{RWM} V _R | Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | 600 | V |
| I _{F(AV)} | Average Rectified Forward Current | 20 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz) | 100 | A |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature Range | -40~150 | °C |



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THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|--------------|--------------------------------------|------|------|
| $R_{th,j-c}$ | Thermal Resistance, Junction to Case | 1.75 | °C/W |

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$) (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 2%)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|----------|---------------------------------------|--|------|---------|
| V_F^* | Maximum Instantaneous Forward Voltage | $I_F=10\text{A}; T_j=25^{\circ}\text{C}$ | 1.55 | V |
| I_R^* | Maximum Instantaneous Reverse Current | $V_R=V_{RWM}$ | 10 | μ A |
| t_{rr} | Maximum Reverse Recovery Time | $I_F=0.1\text{A}; I_R=0.2\text{A}; I_{rec}=0.05\text{A}$ | 50 | ns |

*:Pulse test ,Pulse width=300us,duty cycle \leq 2%

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