

# RU20A

**PRV : 600 Volts**  
**Io : 1.5 Ampere**

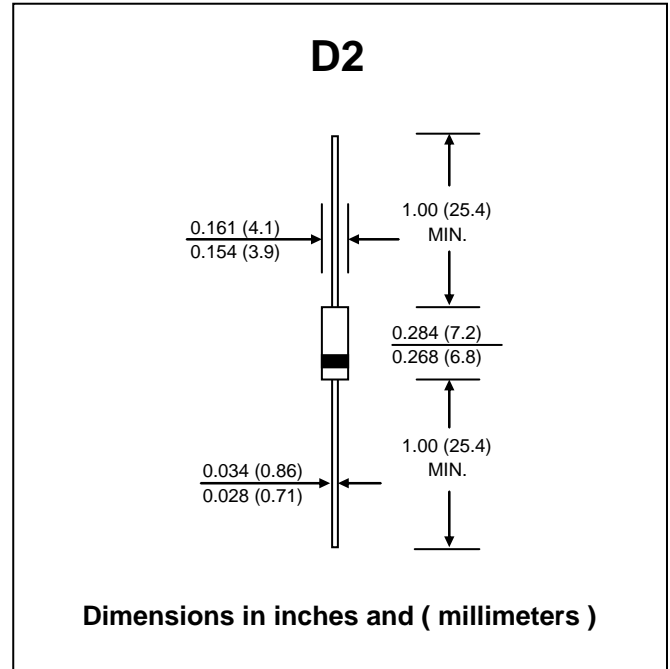
## FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* **Pb / RoHS Free**

## MECHANICAL DATA :

- \* Case : D2 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.465 gram

# FAST RECOVERY RECTIFIER DIODE



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specific.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

| RATING  | SYMBOL             | VALUE         | UNIT |
|---|--------------------|---------------|------|
| Maximum Peak Reverse Voltage  | V <sub>RM</sub>    | 600           | V    |
| Maximum Peak Reverse Surge Voltage  | V <sub>RSM</sub>   | 650           | V    |
| Maximum Average Forward Current   | I <sub>F(AV)</sub> | 1.5           | A    |
| Maximum Peak Forward Surge Current<br>( 50 Hz, Half-cycle, Sine wave, Single Shot ) | I <sub>FSM</sub>   | 50            | A    |
| Maximum Forward Voltage at I <sub>F</sub> = 1.5 A                                   | V <sub>F</sub>     | 1.1           | V    |
| Maximum Reverse Current at V <sub>R</sub> = V <sub>RM</sub> Ta = 25 °C              | I <sub>R</sub>     | 10            | μA   |
| Maximum Reverse Current at V <sub>R</sub> = V <sub>RM</sub> Ta = 100 °C             | I <sub>R(H)</sub>  | 350           | μA   |
| Maximum Reverse Recovery Time (Note 1)  | T <sub>rr</sub>    | 0.4           | μs   |
| Junction Temperature Range  | T <sub>J</sub>     | - 40 to + 150 | °C   |
| Storage Temperature Range   | T <sub>STG</sub>   | - 40 to + 150 | °C   |

### Note:

( 1 ) Reverse Recovery Test Conditions : I<sub>F</sub> = 100 mA, I<sub>RP</sub> = 100 mA.

## RATING AND CHARACTERISTIC CURVES ( RU20A )

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

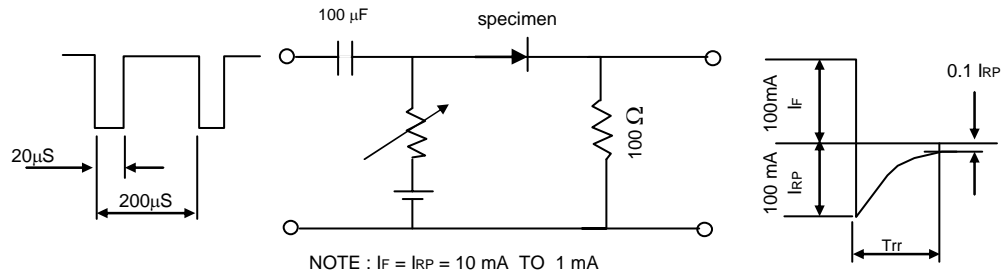


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

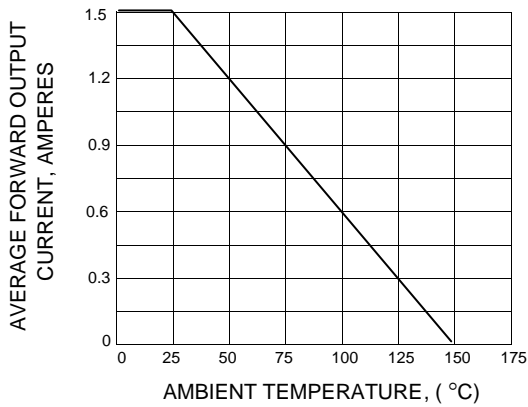


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

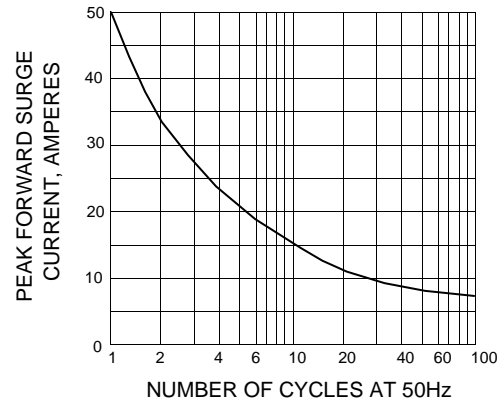


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

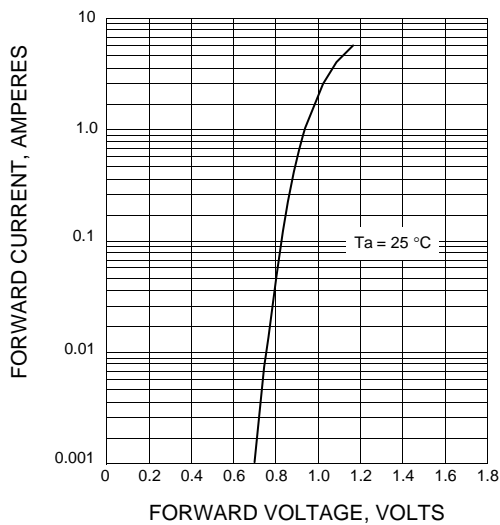


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

