

# RG2Y

## ULTRA FAST RECOVERY RECTIFIER DIODE

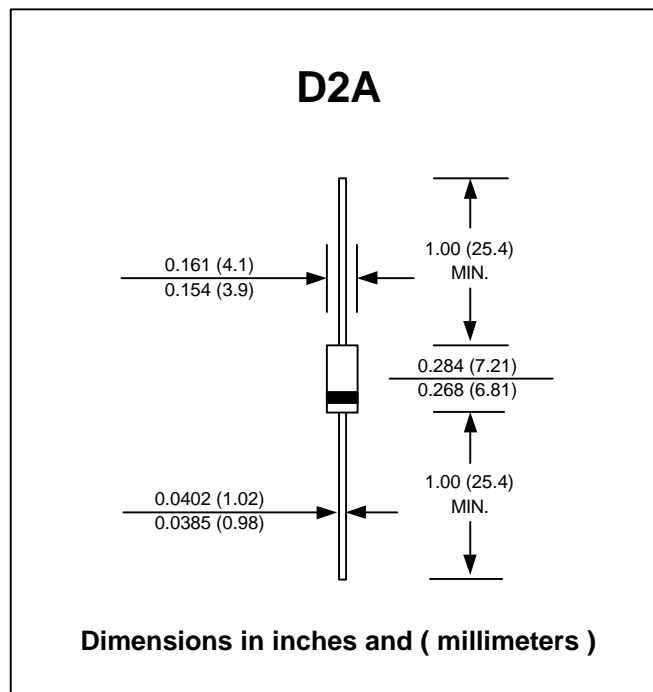
**PRV : 70 Volts**  
**Io : 1.5 Amperes**

### 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 : D2A 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 : 0.645 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

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  | VRM    | 70            | V    |
| Maximum Peak Reverse Surge Voltage  | VRSM   | 70            | V    |
| Maximum Reverse Voltage   | VR     | 70            | V    |
| Maximum Average Forward Current Ta = 60 °C  | IF(AV) | 1.5           | A    |
| Maximum Peak Forward Surge Current<br>( 50 Hz, Half-cycle, Sine wave, Single Shot ) | IFSM   | 50            | A    |
| Maximum Forward Voltage at IF = 1.5 Amps.   | VF     | 1.1           | V    |
| Maximum Reverse Current at Reverse Voltage Ta = 25 °C                               | IR     | 0.5           | mA   |
| Maximum Reverse Current at Reverse Voltage Ta = 100 °C                              | IR(H)  | 2.5           | mA   |
| Maximum Reverse Recovery Time ( Note 1 )  | Trr    | 100           | ns   |
| Junction Temperature Range  | TJ     | - 40 to + 150 | °C   |
| Storage Temperature Range   | TSTG   | - 40 to + 150 | °C   |

### Notes :

( 1 ) Reverse Recovery Test Conditions : IF = 100 mA, IRP = 100 mA.

## RATING AND CHARACTERISTIC CURVES ( RG2Y )

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

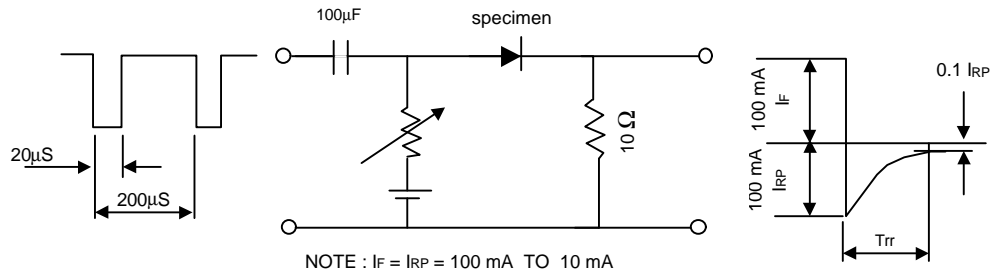


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

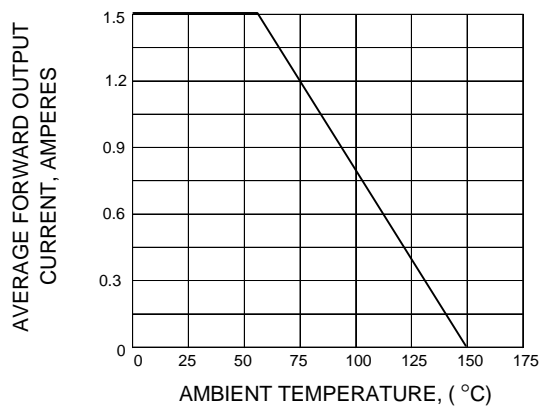


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

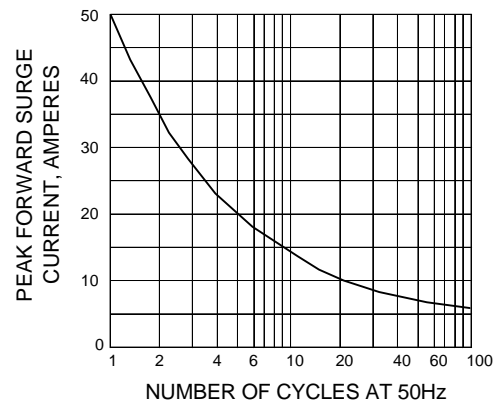


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

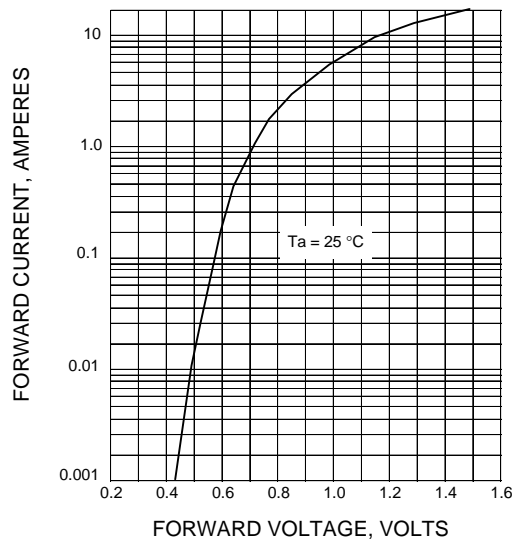


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

