

# RG2 - RG2Z

## ULTRA FAST RECOVERY RECTIFIER DIODES

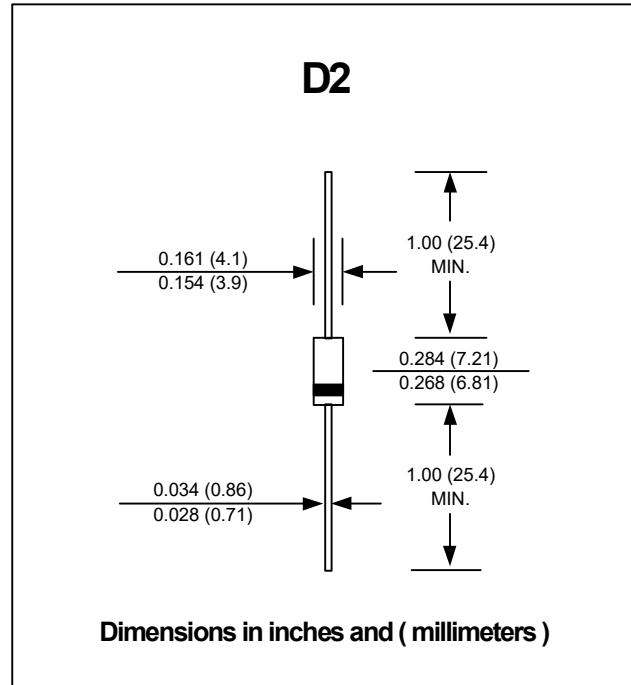
**PRV : 200 - 400 Volts**  
**Io : 1.2 Amperes**

### FEATURES :

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

### 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



### 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%.

| TYPE NUMBER   | SYMBOL             | RG2Z          | RG2 | UNITS |
|---|--------------------|---------------|-----|-------|
| Maximum Peak Reverse Voltage  | V <sub>RM</sub>    | 200           | 400 | Volts |
| Maximum Peak Reverse Surge Voltage  | V <sub>RSM</sub>   | 200           | 400 | Volts |
| Maximum Average Forward Current Ta = 60 °C  | I <sub>F(AV)</sub> | 1.2           |     | Amps. |
| Maximum Peak Forward Surge Current<br>(50 Hz, Half-cycle, Sine wave, Single Shot) | I <sub>FSM</sub>   | 50            |     | Amps. |
| Maximum Forward Voltage at I <sub>F</sub> = 1.5A                                  | V <sub>F</sub>     | 1.5           |     | Volts |
| Maximum Reverse Current at V <sub>R</sub> = V <sub>RM</sub> Ta = 25 °C            | I <sub>R</sub>     | 0.5           |     | mA    |
| Maximum Reverse Current at V <sub>R</sub> = V <sub>RM</sub> Ta = 100 °C           | I <sub>R(H)</sub>  | 2.5           |     | mA    |
| Maximum Reverse Recovery Time ( Note 1 )  | T <sub>rr</sub>    | 100           |     | ns    |
| Junction Temperature Range  | T <sub>J</sub>     | - 40 to + 150 |     | °C    |
| Storage Temperature Range   | T <sub>STG</sub>   | - 40 to + 150 |     | °C    |

### Notes :

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

## RATING AND CHARACTERISTIC CURVES ( RG2 - RG2Z )

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

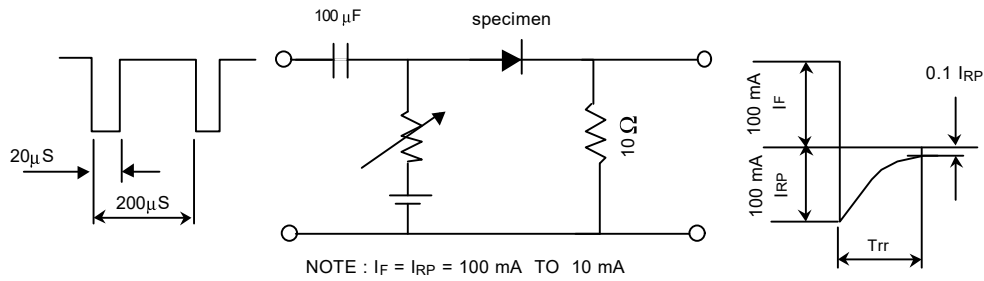


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

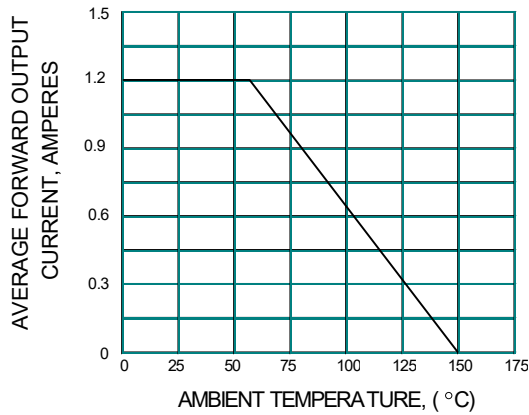


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

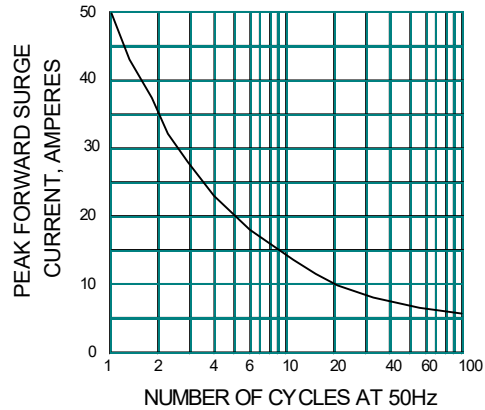


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

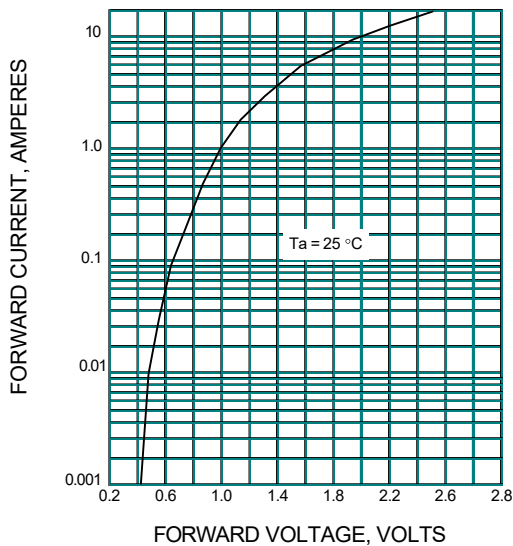


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

