

# RG2 - RG2Z

## ULTRA FAST RECOVERY RECTIFIER DIODES

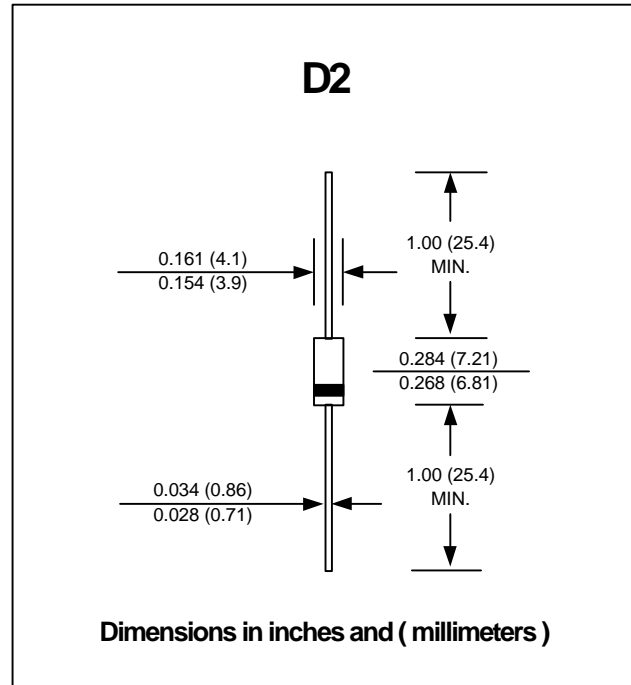
**PRV : 200 - 400 Volts**  
**Io : 1.2 Amperes**

**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 (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

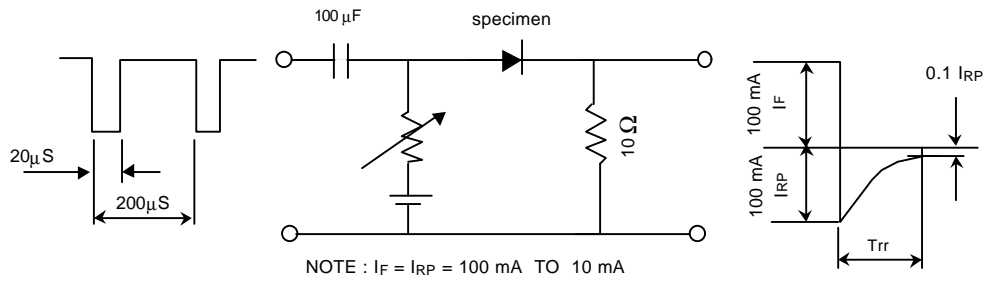
**Notes :**

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

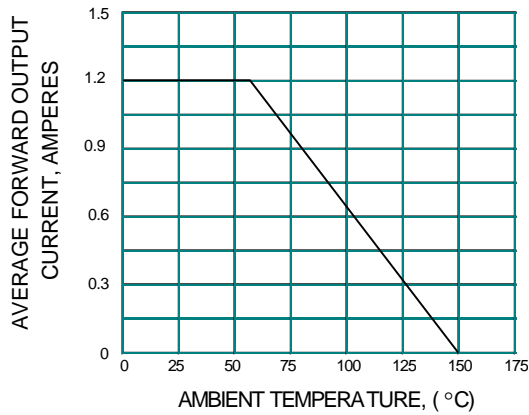
**UPDATE : APRIL 23, 1998**

## RATING AND CHARACTERISTIC CURVES ( RG2 - RG2Z )

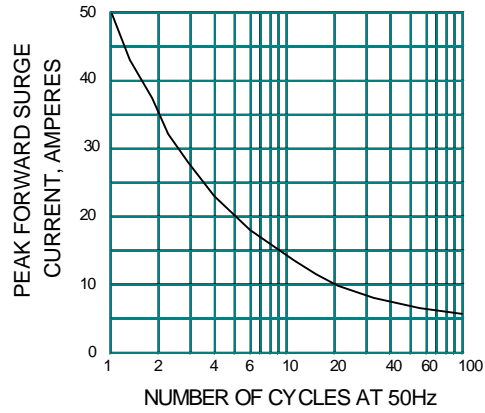
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



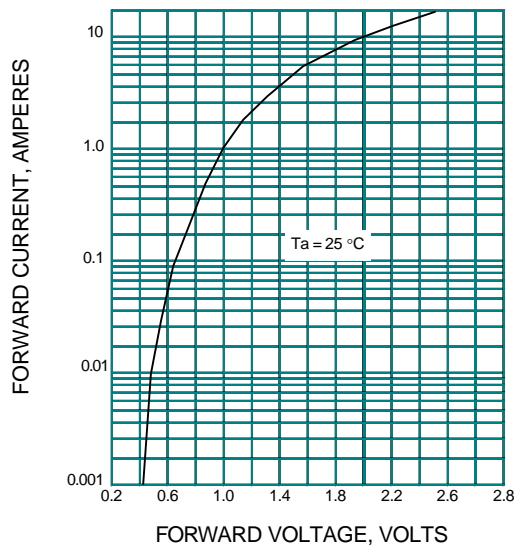
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

