

# RG10 - RG10Y

**PRV : 70 - 600 Volts**  
**Io : 1.0 - 1.5 Amperes**

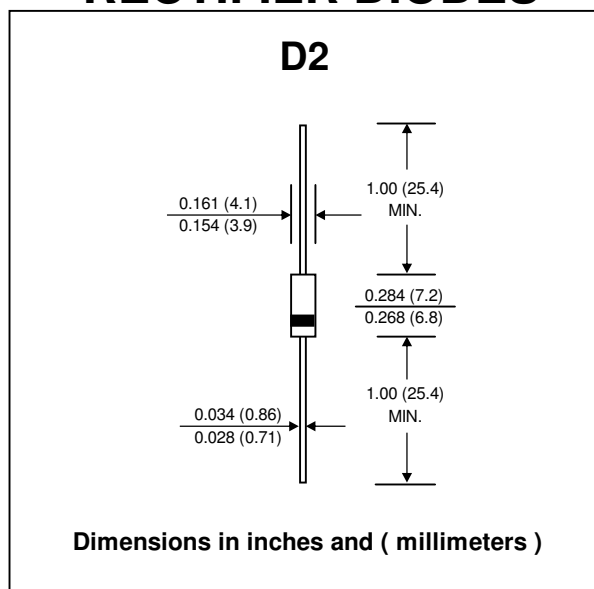
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Super fast recovery time
- \* **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

## SUPER FAST RECTIFIER DIODES



### 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%.

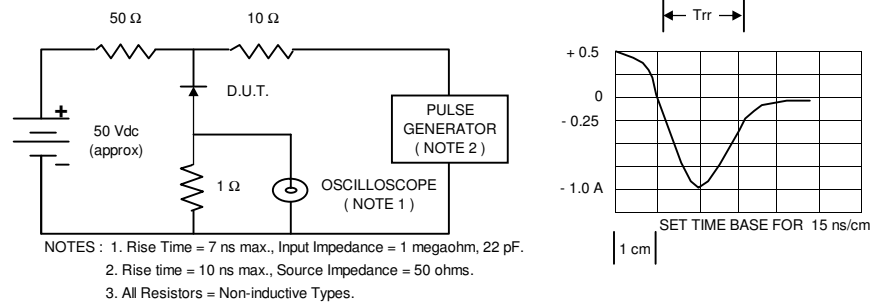
RATING	SYMBOL	RG10Y	RG10	RG10A	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	70	400	600	V
Maximum RMS Voltage	VRMS	49	280	420	V
Maximum Reverse Voltage	VDC	70	400	600	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 55 °C	IF(AV)	1.5	1.2	1.0	A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	50			A
Maximum Peak Forward Voltage at IF = 1.0 A.	VF	1.1	1.8	2.0	V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	IR	5			μA
	IR(H)	50			μA
Maximum Reverse Recovery Time ( Note 1 )	Trr	35			ns
Typical Junction Capacitance ( Note 2 )	CJ	50			pf
Junction Temperature Range	TJ	- 65 to + 150			°C
Storage Temperature Range	TSTG	- 65 to + 150			°C

### Notes :

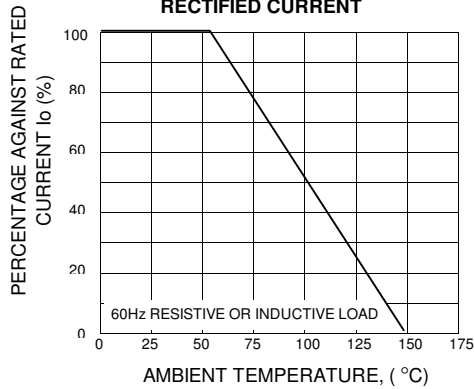
- ( 1 ) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.
- ( 2 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

**RATING AND CHARACTERISTIC CURVES ( RG10 - RG10Y )**

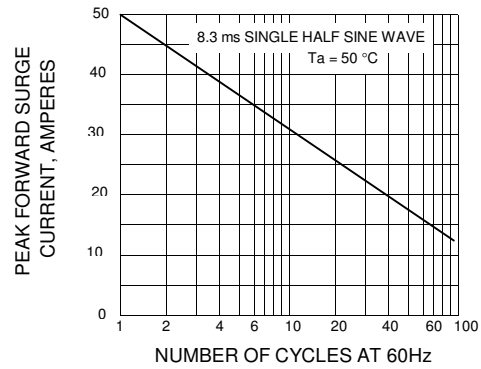
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



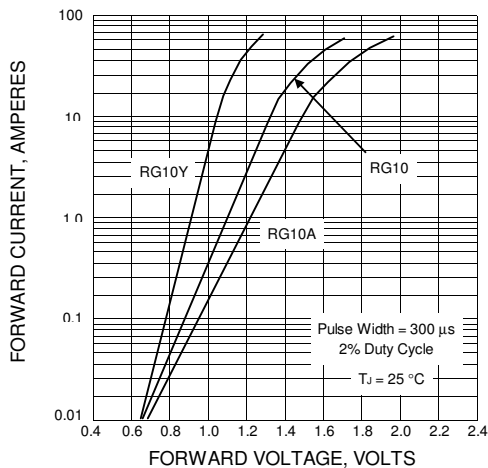
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

