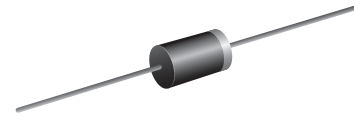
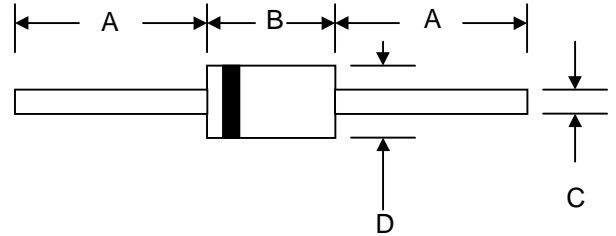


**VOLTAGE RANGE: 70 - 600V**  
**CURRENT: 1.5 -1.0A**



### Features

- Highcurrent capability
- Highsurgecurrent capability
- Highreliability
- Lowreversecurrent
- Low forwardvoltage drop
- Super fast recovery time



### Mechanical Data

- Case: D O - 4 1 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

| DO-41                |      |       |
|----------------------|------|-------|
| Dim                  | Min  | Max   |
| A                    | 25.4 | —     |
| B                    | 4.06 | 5.21  |
| C                    | 0.71 | 0.864 |
| D                    | 2.00 | 2.72  |
| All Dimensions in mm |      |       |



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic  | Symbol             | RG10Y         | RG10 | RG10A | Unit |
|---|--------------------|---------------|------|-------|------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>   | 70            | 400  | 600   | V    |
| Maximum RMS Voltage   | V <sub>RMS</sub>   | 49            | 280  | 420   | V    |
| Maximum Reverse Voltage   | V <sub>DC</sub>    | 70            | 400  | 600   | V    |
| Maximum Average Forward Current<br>0.375"(9.5mm) Lead Length      T <sub>a</sub> = 55 °C                            | I <sub>F(AV)</sub> | 1.5           | 1.2  | 1.0   | A    |
| Maximum Peak Forward Surge Current,<br>8.3ms Single half sine wave Superimposed<br>on rated load (JEDEC Method)     | I <sub>FSM</sub>   | 50            |      |       | A    |
| Maximum Peak Forward Voltage at I <sub>F</sub> = 1.0 A.   | V <sub>F</sub>     | 1.1           | 1.8  | 2.0   | V    |
| Maximum DC Reverse Current      T <sub>a</sub> = 25 °C<br>at Rated DC Blocking Voltage      T <sub>a</sub> = 100 °C | I <sub>R</sub>     | 5             |      |       | μA   |
|   | I <sub>R(H)</sub>  | 50            |      |       | μA   |
| Maximum Reverse Recovery Time ( Note 1 )  | T <sub>rr</sub>    | 35            |      |       | ns   |
| Typical Junction Capacitance ( Note 2 )   | C <sub>J</sub>     | 50            |      |       | pf   |
| Junction Temperature Range  | T <sub>J</sub>     | - 65 to + 150 |      |       | °C   |
| Storage Temperature Range   | T <sub>STG</sub>   | - 65 to + 150 |      |       | °C   |

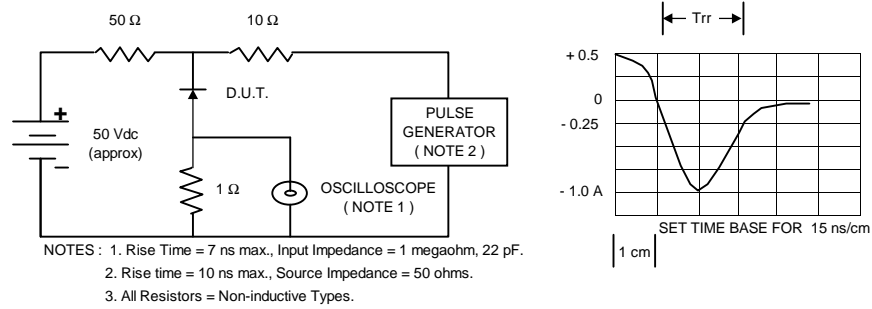
**Notes :**

- ( 1 ) Reverse Recovery Test Conditions : I<sub>F</sub> = 0.5 A, I<sub>R</sub> = 1.0 A, I<sub>rr</sub> = 0.25 A.
- ( 2 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 Vdc

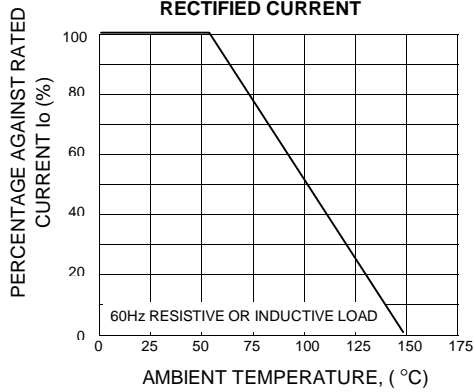


## RATING AND CHARACTERISTIC CURVES ( RG10Y - RG10A)

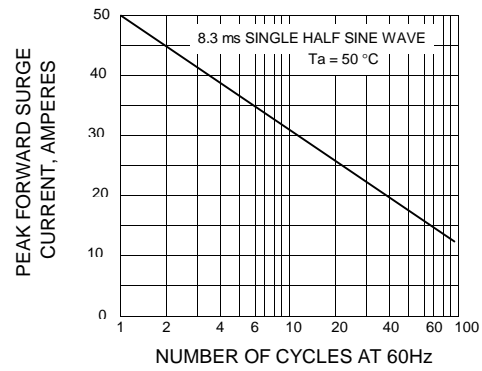
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



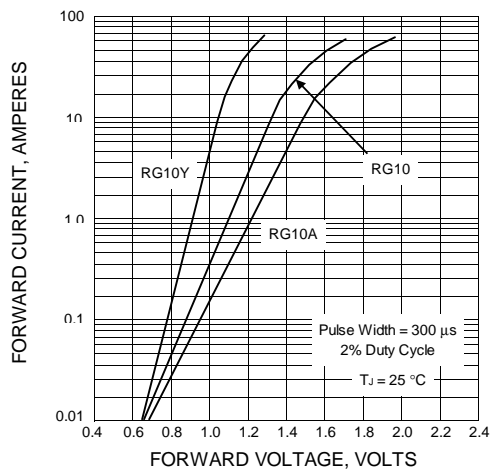
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

