

# BYW98-50S ~ BYW98-200S

**PRV : 50 ~ 200 Volts**  
**Io : 3 Amperes**

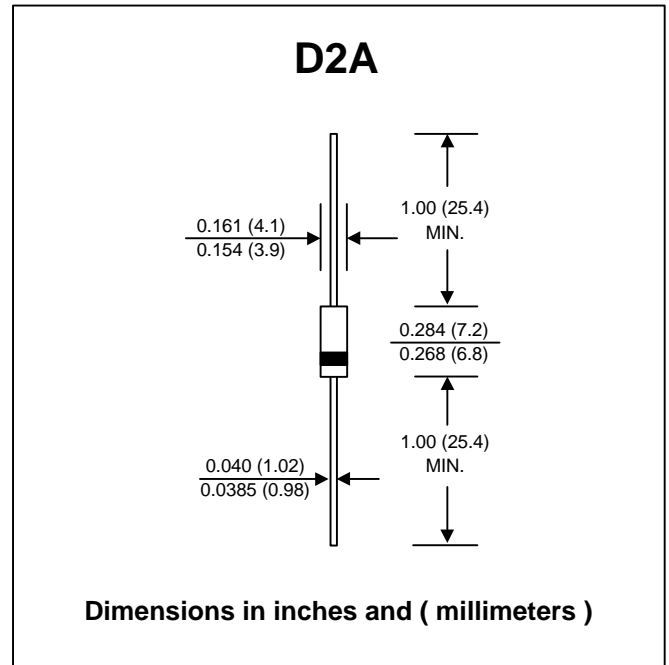
### FEATURES :

- \* 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

## SUPER FAST RECOVERY 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%.

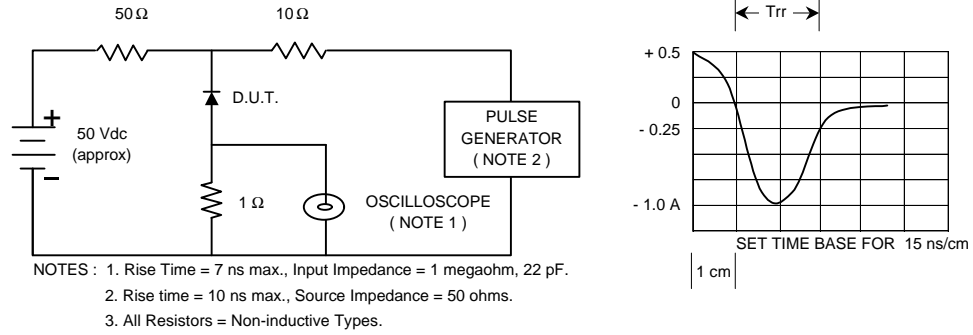
| RATING  | SYMBOL | BYW 98-50S    | BYW 98-100S | BYW 98-150S | BYW 98-200S | UNIT  |
|---|--------|---------------|-------------|-------------|-------------|-------|
| Maximum Repetitive Peak Reverse Voltage               | VRRM   | 50            | 100         | 150         | 200         | Volts |
| Maximum Average Forward Current                       | IF(AV) | 3.0           |             |             |             | Amps. |
| Maximum Peak Forward Surge Current                    | IFSM   | 70            |             |             |             | Amps. |
| Maximum Forward Voltage at IF = 3 Amps. ; TJ = 100 °C | VF     | 0.85          |             |             |             | Volt  |
| Maximum Reverse Current at VRRM , TJ = 100 °C         | IR     | 1.0           |             |             |             | mA    |
| Maximum Reverse Recovery Time , TJ = 25 °C (1)        | Trr    | 35            |             |             |             | ns    |
| Junction Temperature Range                            | TJ     | - 65 to + 150 |             |             |             | °C    |
| Storage Temperature Range                             | TSTG   | - 65 to + 150 |             |             |             | °C    |

**NOTE :**

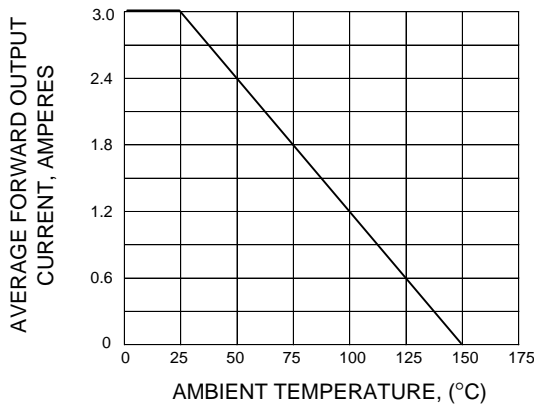
(1) Reverse Recovery Test Conditions : IF = 0.5A , IR = 1A , Irr = 0.25A

**RATING AND CHARACTERISTIC CURVES ( BYW98-50S ~ BYW98-200S )**

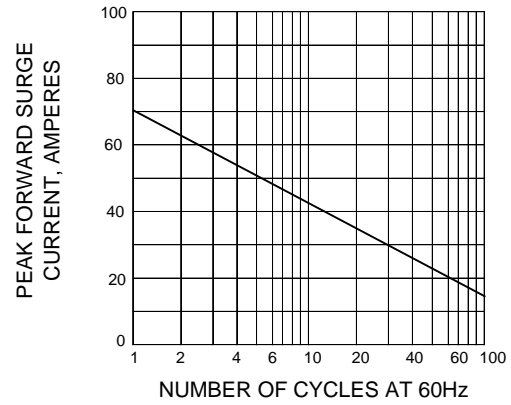
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



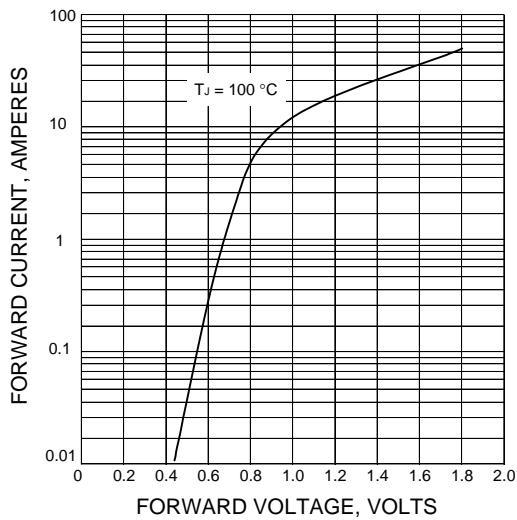
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

