

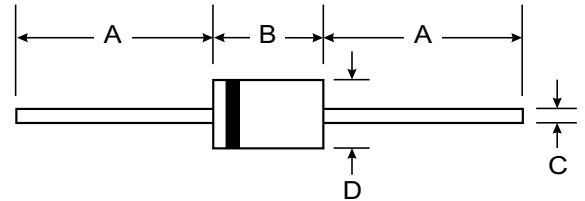
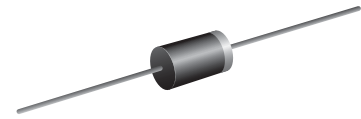
**VOLTAGE RANGE: 600 - 1000V**  
**CURRENT: 2.0 A**

### Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop

### Mechanical Data

- Case : DO-15 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



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
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%.

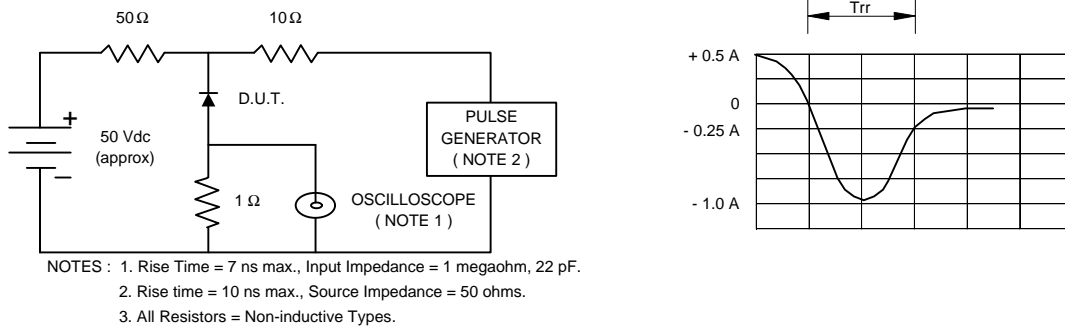
Characteristic	Symbol	BYW54	BYW55	BYW56	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	600	800	1000	V
Maximum Crest Working Reverse Voltage	V <sub>RWM</sub>	600	800	1000	V
Maximum Continuous Reverse Voltage	V <sub>R</sub>	600	800	1000	V
Min. Reverse Avalanche Breakdown Voltage @ I <sub>R</sub> = 0.1 mA	V <sub>(BR)R-min.</sub>	650	900	1300	V
Maximum Average Forward Current T <sub>tp</sub> = 45 °C (Note 1)	I <sub>F(AV)</sub>	2.0			A
Maximum Non-Repetitive Peak Forward Surge Current	I <sub>FSM</sub>	50			A
Maximum Repetitive Peak Forward Current	I <sub>FRM</sub>	12			A
Maximum Forward Voltage at I <sub>F</sub> = 1.0 A	V <sub>F</sub>	1.0			V
Maximum Reverse Current at V <sub>R</sub> = V <sub>RRM</sub>	I <sub>R</sub>	1.0			μA
Maximum Reverse Current at V <sub>R</sub> = V <sub>RRM</sub> , T <sub>j</sub> = 165 °C	I <sub>R(H)</sub>	150			μA
Typical Reverse Recovery Time (Note 2)	T <sub>rr</sub>	3.0			μs
Thermal Resistance - Junction to Ambient	R <sub>θJA</sub>	100			K / W
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175			°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175			°C

**Notes :**

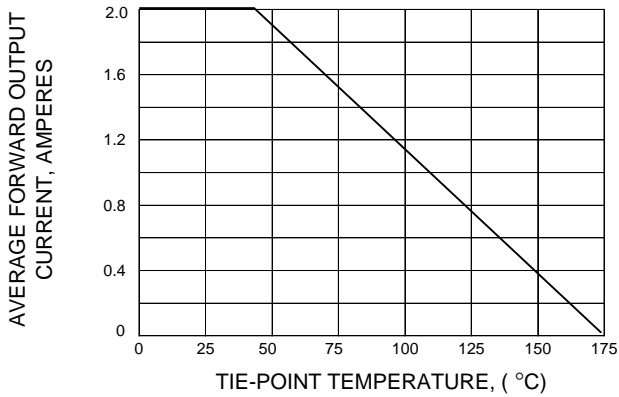
- (1) Lead Length 10 mm.
- (2) Test Conditions : I<sub>F</sub> = 0.5 A to I<sub>R</sub> = 1 A ; measured at I<sub>rr</sub> = 0.25 A

## RATING AND CHARACTERISTIC CURVES ( BYW54 - BYW56 )

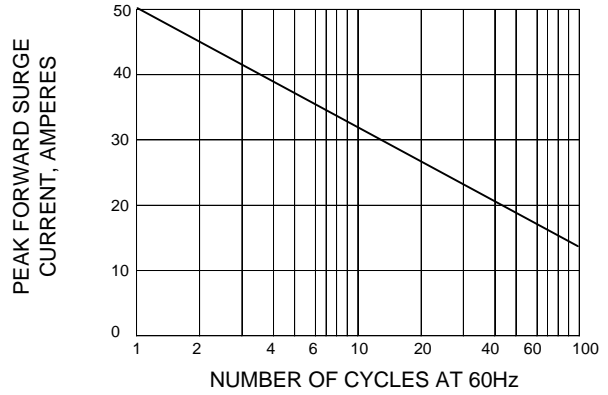
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



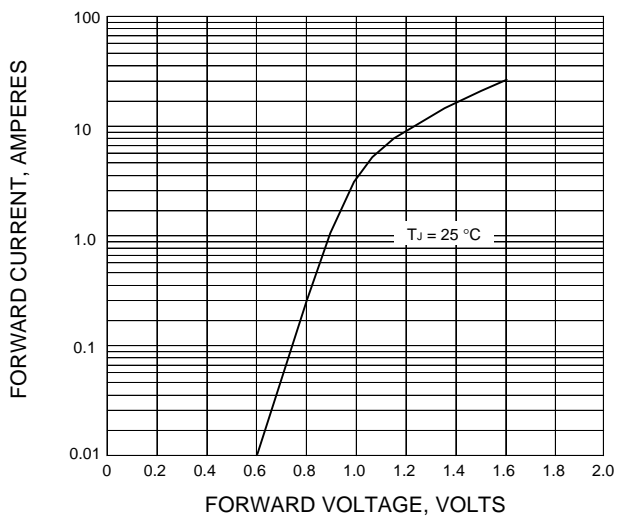
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

