

# BYW54 - BYW56

**PRV : 600 - 1000Volts**  
**Io : 2.0 Amperes**

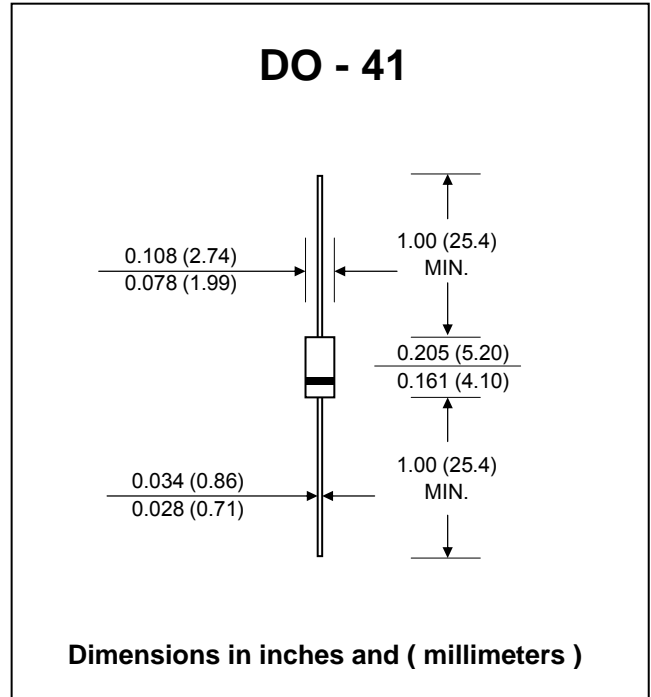
**FEATURES :**

- \* Glass passivated junction chip
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

**MECHANICAL DATA :**

- \* Case : DO-41 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 : 0.335 gram

## AVALANCHE 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%.

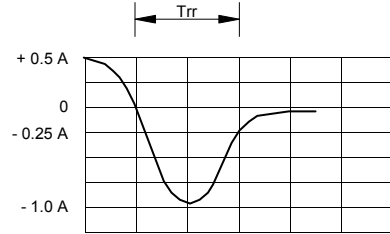
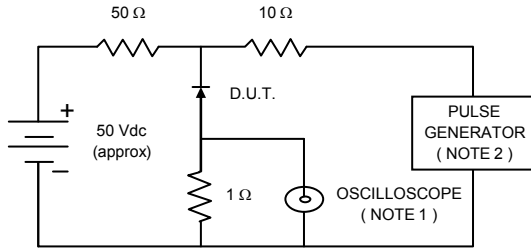
RATING	SYMBOL	BYW54	BYW55	BYW56	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	600	800	1000	V
Maximum Crest Working Reverse Voltage	$V_{RWM}$	600	800	1000	V
Maximum Continuous Reverse Voltage	$V_R$	600	800	1000	V
Min. Reverse Avalanche Breakdown Voltage @ $I_R = 0.1 \text{ mA}$	$V_{(BR)R-min.}$	650	900	1100	V
Maximum Average Forward Current $T_{tp} = 45 \text{ }^\circ\text{C}$ (Note 1)	$I_{F(AV)}$	2.0			A
Maximum Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	50			A
Maximum Repetitive Peak Forward Current	$I_{FRM}$	12			A
Maximum Forward Voltage at $I_F = 1.0 \text{ A}$	$V_F$	1.0			V
Maximum Reverse Current at $V_R = V_{RRM}$ $V_R = V_{RRM}, T_j = 165 \text{ }^\circ\text{C}$	$I_R$	1.0			$\mu\text{A}$
	$I_{R(H)}$	150			$\mu\text{A}$
Typical Reverse Recovery Time (Note 2)	$T_{rr}$	3.0			$\mu\text{s}$
Thermal Resistance - Junction to Ambient	$R_{\theta JA}$	100			K / W
Junction Temperature Range	$T_j$	- 65 to + 175			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 175			$^\circ\text{C}$

**Notes :**

- (1) Lead Length 10 mm.
- (2) Test Conditions :  $I_F = 0.5 \text{ A}$  to  $I_R = 1 \text{ A}$  ; measured at  $I_{rr} = 0.25 \text{ A}$

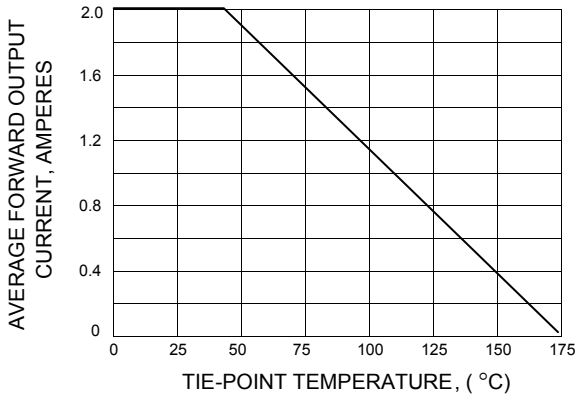
**RATING AND CHARACTERISTIC CURVES ( BYW54 - BYW56 )**

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

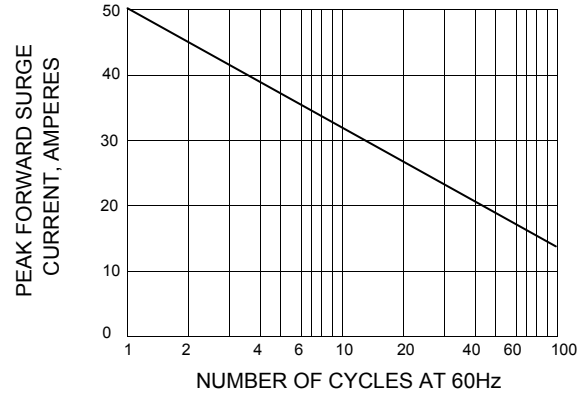


NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.  
 2. Rise time = 10 ns max., Source Impedance = 50 ohms.  
 3. All Resistors = Non-inductive Types.

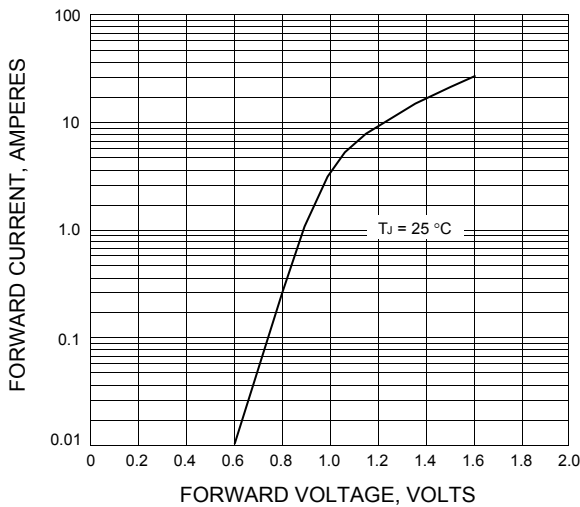
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



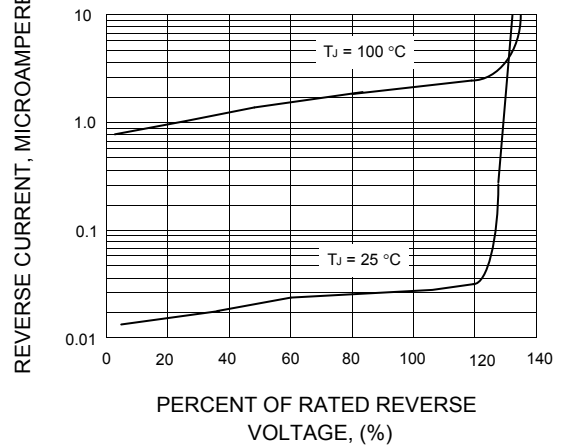
**FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**



单击下面可查看定价，库存，交付和生命周期等信息

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