

# BYW95A - BYW95C

# AVALANCHE FAST SOFT-RECOVERY RECTIFIER DIODES

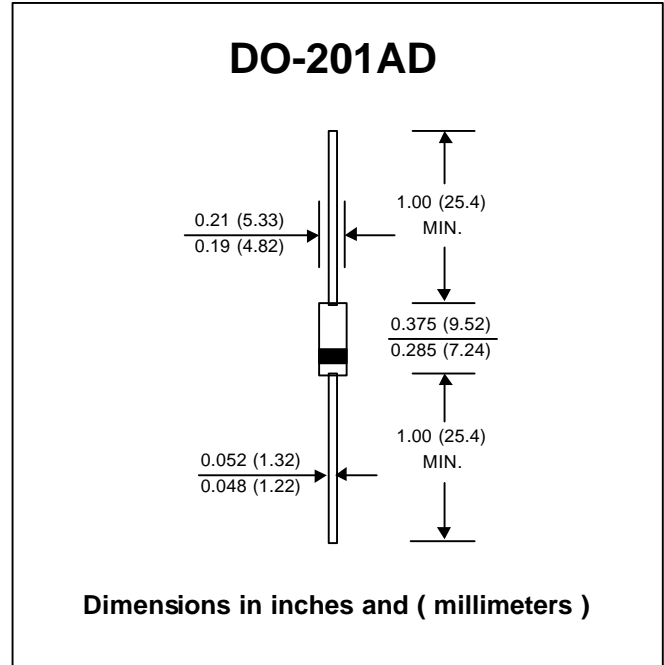
**PRV : 200 - 600 Volts**  
**Io : 3.0 Amperes**

### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency

### MECHANICAL DATA :

- \* Case : DO-201AD 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 : 1.11 grams



### 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	BYW95A	BYW95B	BYW95C	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	400	600	Volts
Maximum Continuous Reverse Voltage	$V_R$	200	400	600	Volts
Min. Reverse Avalanche Breakdown Voltage @ $I_R = 0.1 \text{ mA}$	$V_{(BR)R-min}$	300	500	700	Volts
Maximum Average Forward Current $T_{tp} = 60 \text{ }^\circ\text{C}$ (Note 1)	$I_{F(AV)}$	3.0			Amps.
Maximum Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	70			Amps.
Maximum Repetitive Peak Forward Current	$I_{FRM}$	15			Amps.
Maximum Forward Voltage at $I_F = 5.0 \text{ Amps.}$	$V_F$	1.5			Volts
Maximum Reverse Current at Reverse Voltage	$I_R$	5.0			$\mu\text{A}$
Maximum Reverse Current at Reverse Voltage $T_j = 165 \text{ }^\circ\text{C}$	$I_{R(H)}$	150			$\mu\text{A}$
Maximum Reverse Recovery Time (Note 2)	$T_{rr}$	250			ns
Thermal Resistance - Junction to Ambient	$R_{\theta JA}$	75			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) Measured with  $I_F = 1 \text{ Amp}$  to  $V_R \geq 30\text{V}$

## RATING AND CHARACTERISTIC CURVES ( BYW95A - BYW95C )

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC

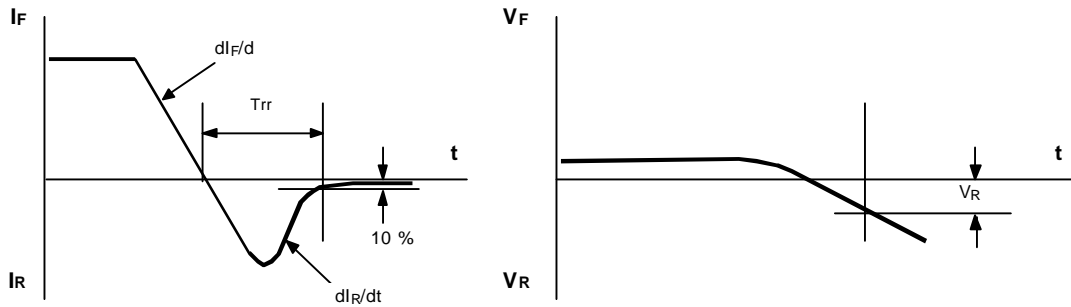


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

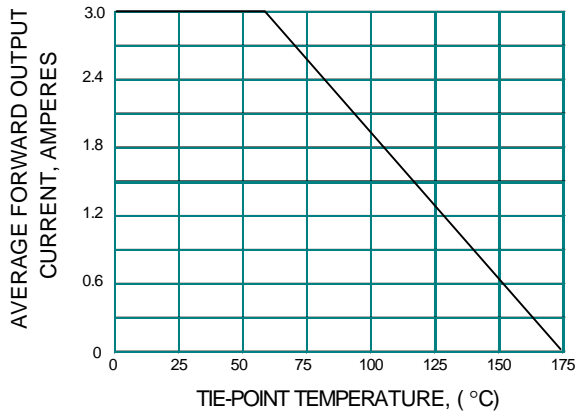


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

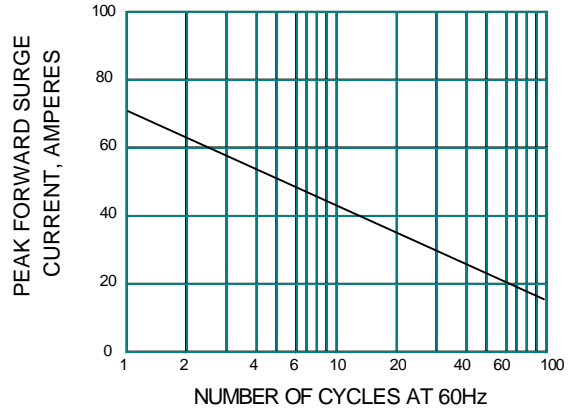


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

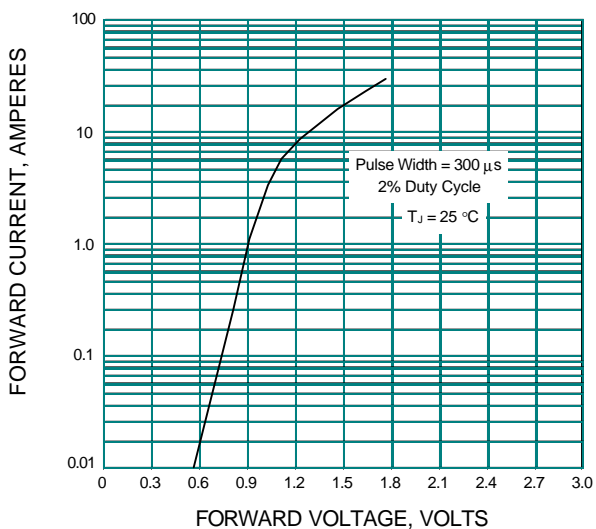


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

