

BYW95A - BYW95C

AVALANCHE FAST SOFT-RECOVERY RECTIFIER DIODES

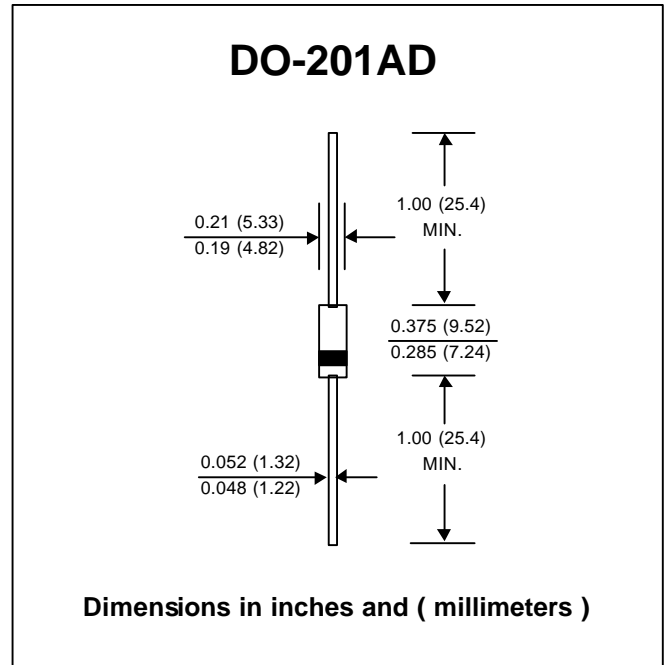
PRV : 200 - 600 Volts
Io : 3.0 Amperes

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			μA
Maximum Reverse Current at Reverse Voltage $T_j = 165 \text{ }^\circ\text{C}$	$I_{R(H)}$	150			μA
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

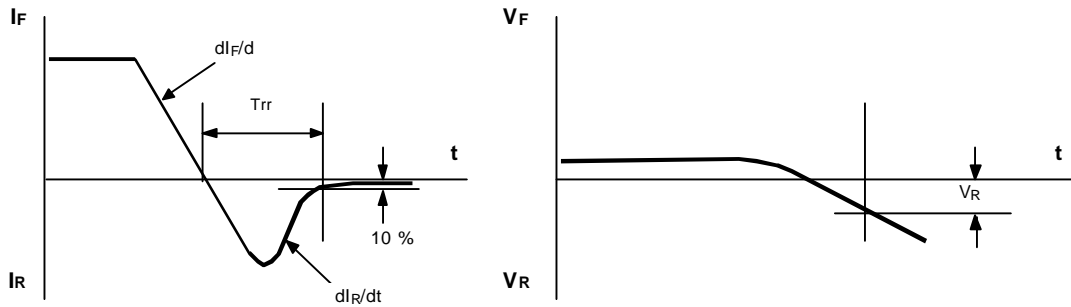


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

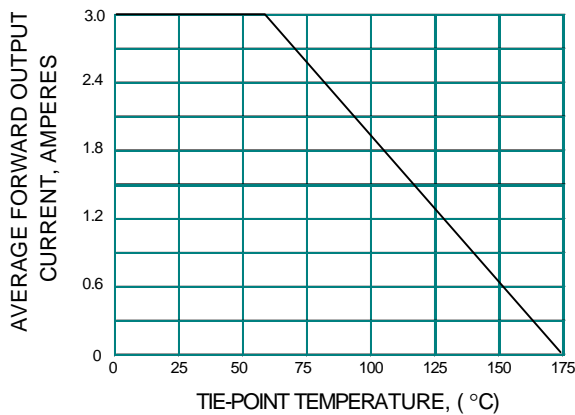


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

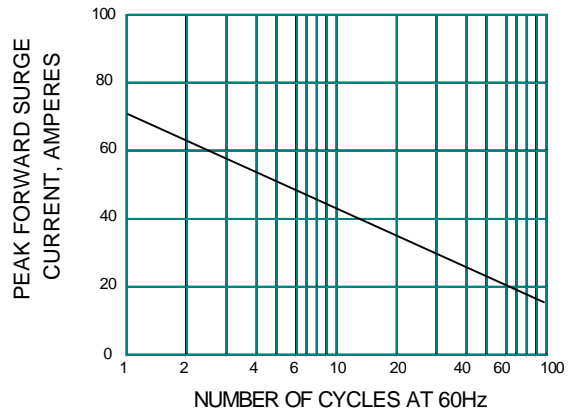


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

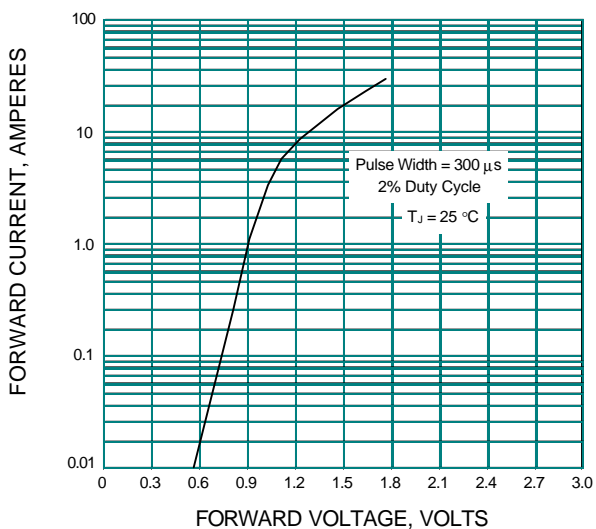


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

