

BYM36A - BYM36E

AVALANCHE FAST RECOVERY RECTIFIER DIODES

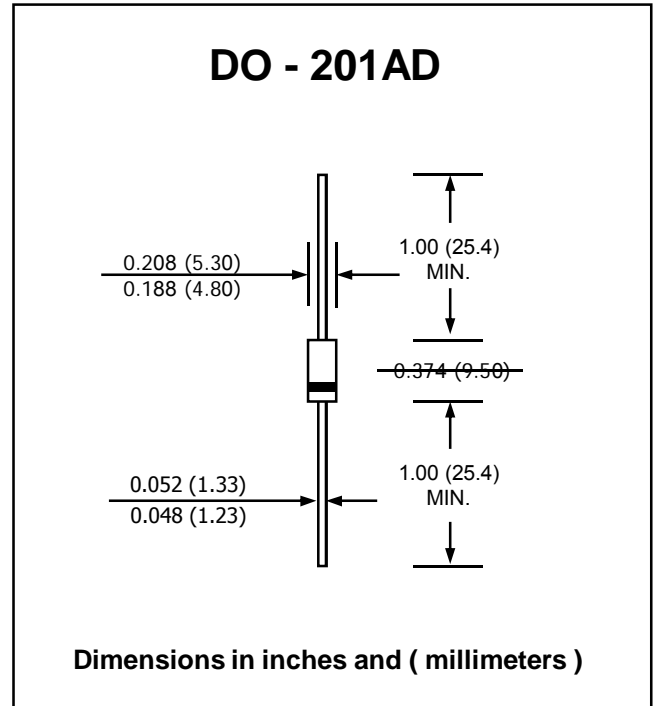
PRV : 200 - 1000 Volts
Io : 3.0 Amperes

FEATURES :

- * Hermetically sealed package
- * Very low switching losses
- * Low reverse current
- * High reverse current
- * **Pb / RoHS Free**

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 : 1.16 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	BYM 36A	BYM 36B	BYM 36C	BYM 36D	BYM 36E	UNIT	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V	
Maximum Continuous Reverse Voltage	V_R	200	400	600	800	1000	V	
Min. Reverse Breakdown Voltage @ $I_R = 100 \mu A$	$V_{(BR)R-min}$	300	500	700	900	1100	V	
Maximum Average Forward Current (See Fig. 1 and Fig. 2)	$I_{F(AV)}$	3.0		2.9			A	
Maximum Peak Forward Surge Current, $t_p = 10$ ms, half sine wave	I_{FSM}	65						A
Maximum Forward Voltage at $I_F = 3$ A , $T_J = 25$ °C at $I_F = 3$ A , $T_J = 175$ °C	V_F	1.60		1.78			V	
		1.22		1.28				
Maximum Reverse Current at $V_R = V_{RRM}$, $T_J = 25$ °C at $V_R = V_{RRM}$, $T_J = 150$ °C	I_R	5.0						μA
	$I_{R(H)}$	100						μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	100		150			ns	
Thermal Resistance - Junction to Ambient (Note 2)	$R_{\theta JA}$	70						K / W
Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 175						°C

Notes :

- (1) Reverse recovery test conditions : $I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A$
- (2) On PC Board with spacing 25 mm

RATING AND CHARACTERISTIC CURVES (BYM36A - BYM36E)

FIG.1 - MAX. AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

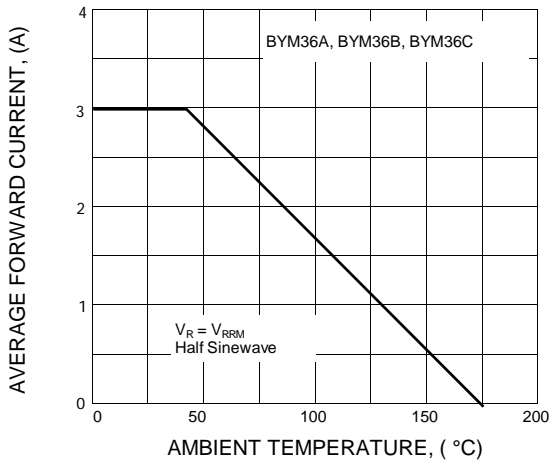


FIG.2 - MAX. AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

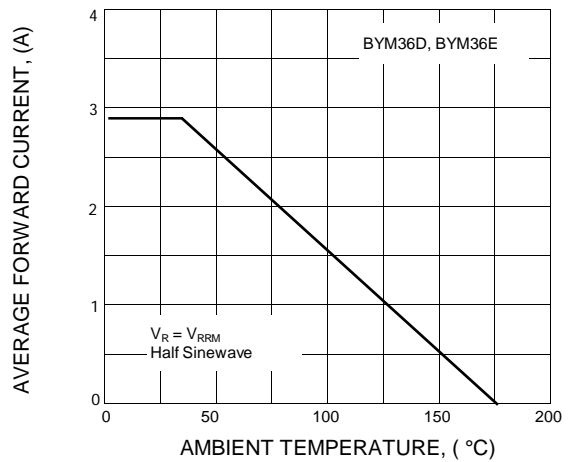


FIG.3 - MAX. FORWARD CURRENT VS. FORWARD VOLTAGE

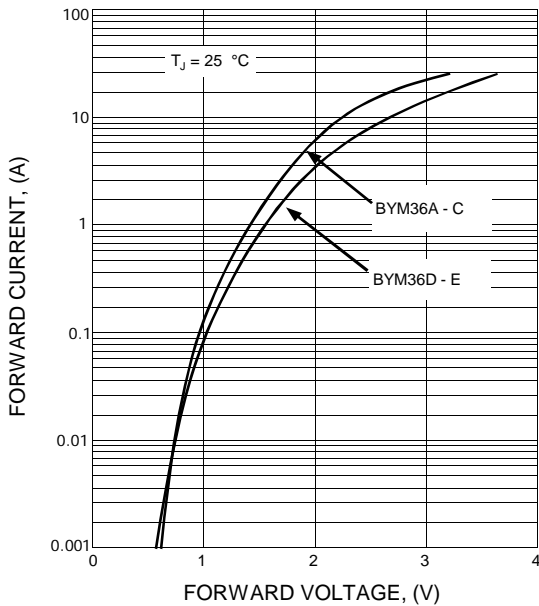


FIG.4 - MAX. REVERSE CURRENT VS. JUNCTION TEMPERATURE

