

BYM36AGP THRU BYM36EGP

**SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER**
VOLTAGE: 200V to 1000V CURRENT: 3.0A

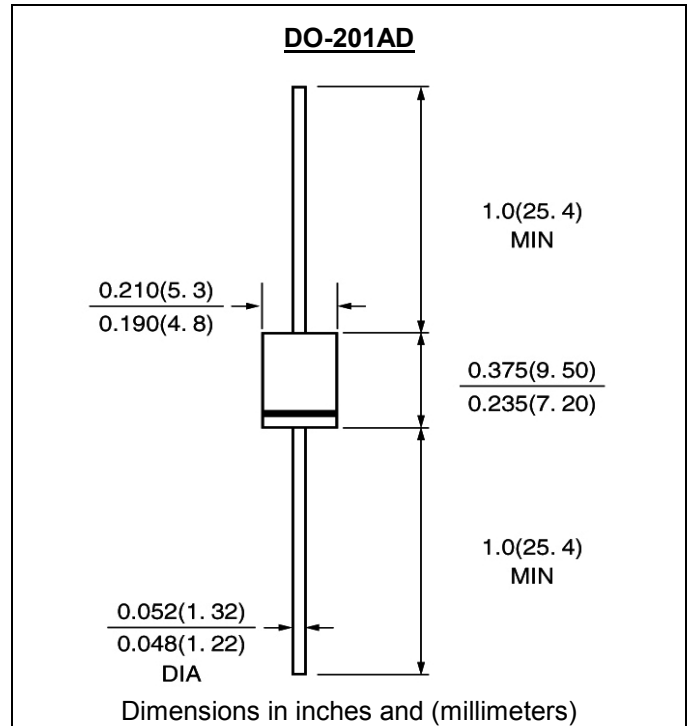


FEATURE

High temperature metallurgically bonded construction
Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
350°C /10sec/0.375"lead length at 5 lbs tension
Low leakage current Typical $I_r < 0.1\mu A$
Excellent stability
Guaranteed avalanche energy absorption capability

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	BYM36 AGP	BYM36 BGP	BYM36 CGP	BYM36 DGP	BYM36 EGP	units
Maximum Recurrent Peak Reverse Voltage	V_{rrm}	200	400	600	800	1000	V
Maximum RMS Voltage	V_{rms}	140	280	420	560	700	V
Maximum DC blocking Voltage	V_{dc}	200	400	600	800	1000	V
reverse avalanche breakdown voltage at $I_R = 0.1\text{ mA}$	$V_{(BR)R}(\text{min})$	300	500	700	900	1100	V
Maximum Average Forward Rectified Current 10mm lead length at $T_a = 55^\circ\text{C}$	$I_{f(av)}$	3.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{fsm}	65					A
Maximum Forward Voltage at rated Forward Current and 25°C $I_F = 3.0\text{A}$	V_f	1.6			1.78		V
non-repetitive peak reverse avalanche energy (Note 1)	E_{rsm}	10					mJ
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at rated DC blocking voltage $T_a = 125^\circ\text{C}$	I_r	10.0 150.0					μA μA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	100			150		nS
Typical Junction Capacitance (Note 3)	C_j	75.0					pF
Typical Thermal Resistance (Note 4)	$R_{\theta ja}$	20.0					$^\circ\text{C}/W$
Storage and Operating Junction Temperature	T_{stg}, T_j	-65 to +175					$^\circ\text{C}$

Note: 1. $L = 120\text{ mH}$; $T_j = T_j$ max prior to surge; inductive load switched off
2. Reverse Recovery Condition $I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$
3. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
4. Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

1

Fig.1 Maximum average forward current as a function of tie-point temperature (including losses due to reverse leakage).

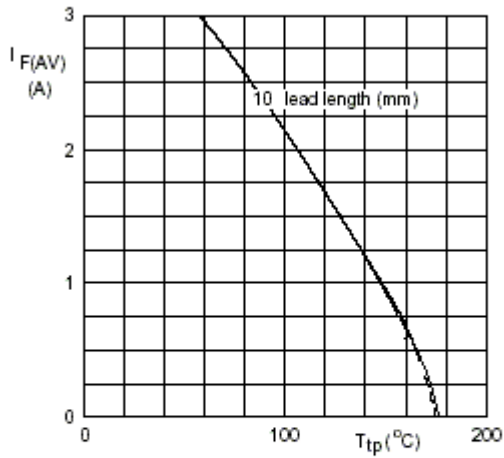


Fig.2 Forward current as a function of forward voltage; maximum values.

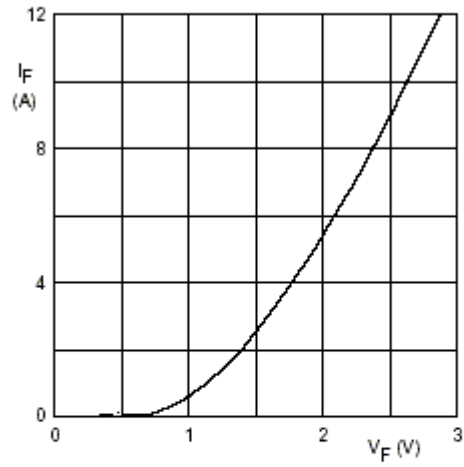


Fig.3 Reverse current as a function of junction temperature; maximum values.

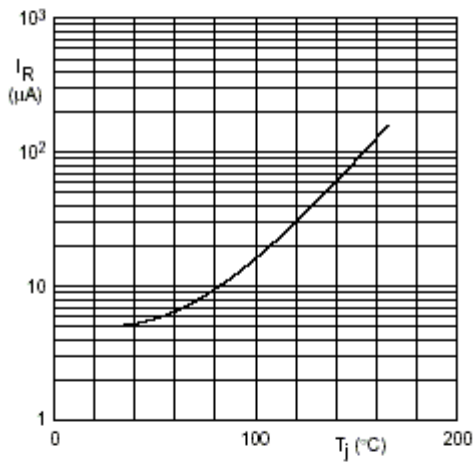


Fig.4 Diode capacitance as a function of reverse voltage; typical values.

