

# BYW72GP THRU BYW76GP

**SINTERED GLASS JUNCTION  
FAST SWITCHING PLASTIC RECTIFIER**  
VOLTAGE:200 TO 600V      CURRENT: 3.0A

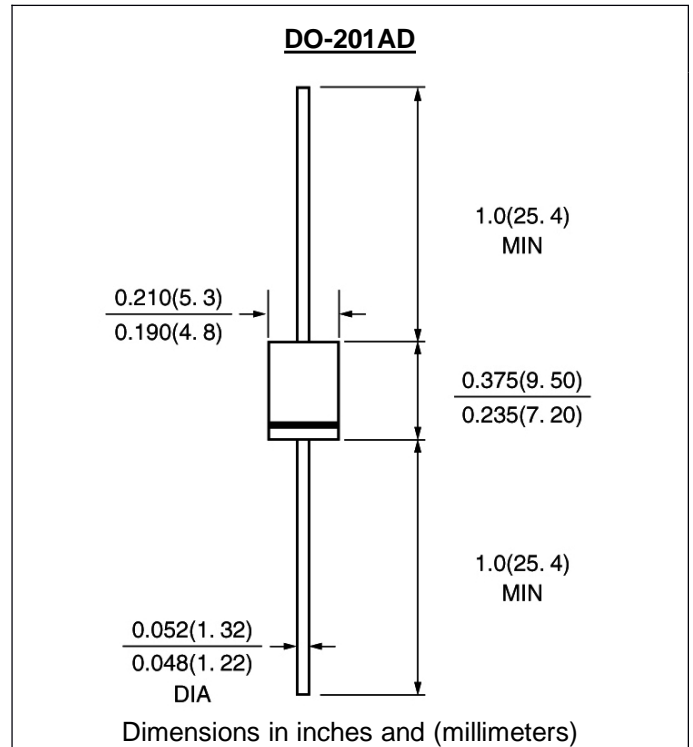


## FEATURE

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  
Operate at Ta =45°C with no thermal run away  
Typical Ir<0.1µA

## 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	BYW 72GP	BYW 73GP	BYW 74GP	BYW 75GP	BYW 76GP	units	
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	300	400	500	600	V	
Maximum RMS Voltage	Vrms	140	210	280	350	420	V	
Maximum DC blocking Voltage	Vdc	200	300	400	500	600	V	
Maximum Average Forward Rectified Current 3/8"lead length at Ta =45°C	If(av)	3.0						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	100						A
Maximum Forward Voltage at rated Forward Current and 25°C IF=3A	Vf	1.1						V
Non-repetitive peak reverse avalanche energy (Note 1)	Ers	10						mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	5.0 100						µA µA
Maximum Reverse Recovery Time (Note 1)	Trr	200						nS
Typical Junction Capacitance (Note 2)	Cj	60						pF
Typical Thermal Resistance (Note 3)	R(ja)	20						°C /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175						°C

Note: 1.R=400mA; Tj=Tjmax prior to surge; inductive load switched off  
2.Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A  
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

Figure 1. Max. Thermal Resistance vs. Lead Length

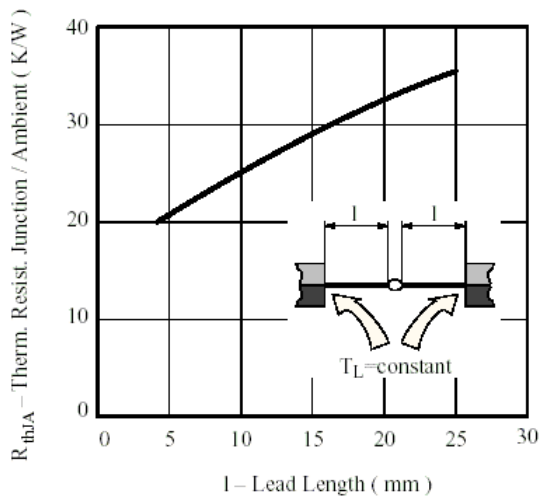


Figure 2. Reverse Current vs. Junction Temperature

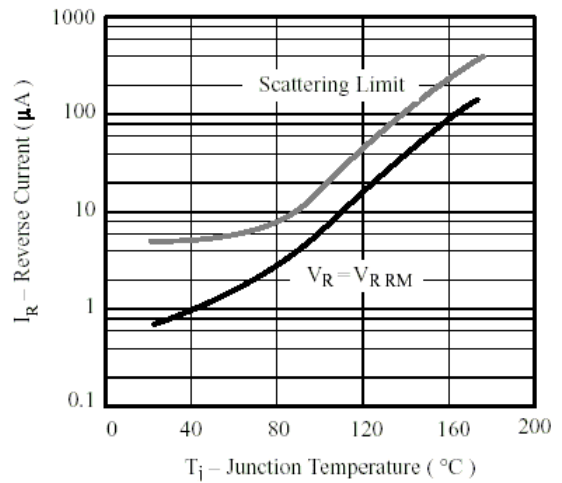


Figure 3. Max. Average Forward Current vs. Ambient Temperature

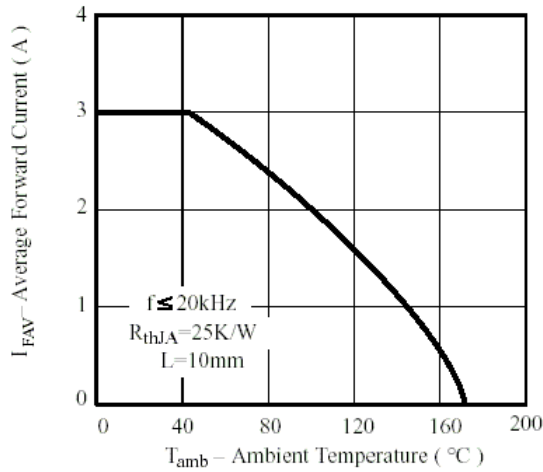


Figure 4. Max. Forward Current vs. Forward Voltage

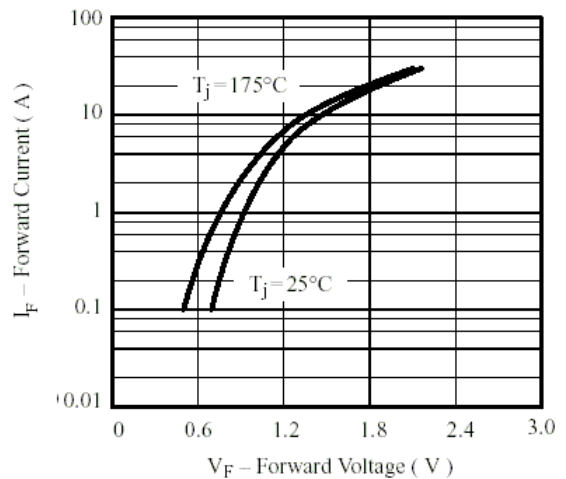


Figure 5. Typ. Diode Capacitance vs. Reverse Voltage

