## BYW32GP THRU BYW36GP

# SINTERED GLASS JUNCTION FAST SWITCHING PLASTIC RECTIFIER VOLTAGE:200 TO 600V CURRENT: 2.0A



### **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 =55°C with no thermal run away Typical Ir<0.1 $\mu$ A

#### **MECHANICAL DATA**

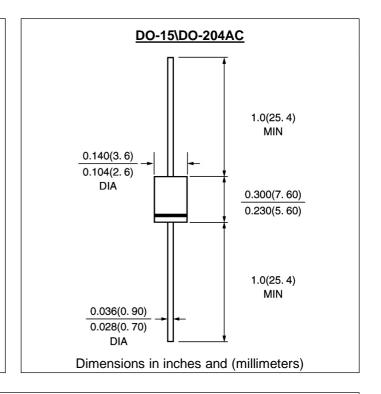
Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C

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 32GP	BYW 33GP	BYW 34GP	BYW 35GP	BYW 36GP	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)	2.0					А
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	50					А
Maximum Forward Voltage at rated Forward Current and 25°C at1.0A	Vf	1.1					V
Non-repetitive peak reverse avalanche energy (Note 1)	Ersm	10					mJ
Maximum DC Reverse Current Ta =25°C	150 Ir						μΑ
at rated DC blocking voltage $Ta = 125^{\circ}C$							μΑ
Maximum Reverse Recovery Time (Note 2)	Trr	200					nS
Typical Junction Capacitance (Note 3)	Cj	60					pF
Typical Thermal Resistance (Note 4)	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

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#### RATINGS AND CHARACTERISTIC CURVES BYW32GP THRU BYW36GP

Figure 1. Max. Thermal Resistance vs. Lead Length

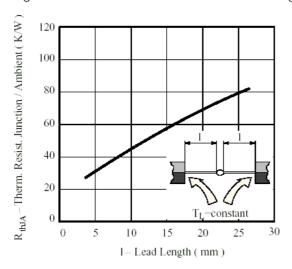


Figure 3. Max. Average Forward Current vs. Ambient Temperature

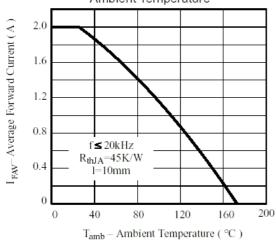


Figure 5. Typ. Diode Capacitance vs. Reverse Voltage

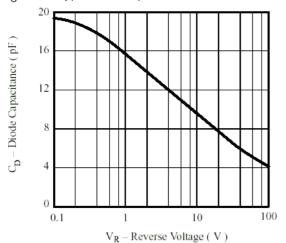


Figure 2. Reverse Current vs. Junction Temperature

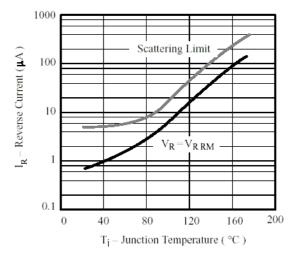
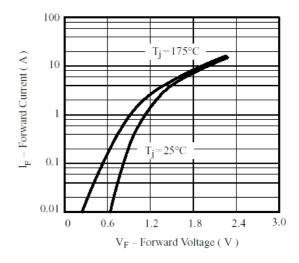


Figure 4. Max. Forward Current vs. Forward Voltage



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