BYW54GP THRU BYW56GP

SINTERED GLASS JUNCTION
PLASTIC RECTIFIER

VOLTAGE:600 TO 1000V **CURRENT: 2.0A**

GULF SEMI

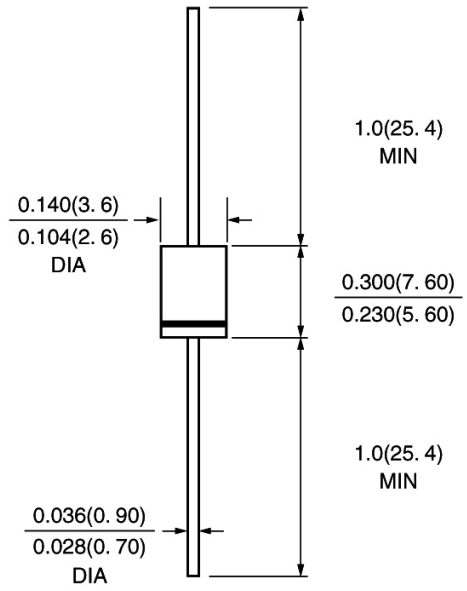
FEATURE

High temperature metallurgically bonded construction
Sintered glass cavity free junction
Capability of meeting environmental standard of MIL-S-19500
High temperature soldering guaranteed
350℃ /10sec/0.375"lead length at 5 lbs tension
Operate at Ta =45℃ 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

DO-15\DO-204AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25℃, unless otherwise stated, for capacitive load, derate current by 20%)

	SYMBOL	BYW54GP	BYW55GP	BYW56GP	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	800	1000	V
Maximum RMS Voltage	Vrms	420	560	700	V
Maximum DC blocking Voltage	Vdc	600	800	1000	V
reverse avalanche breakdown voltage I_R = 0.1 mA	$V_{(BR)R}$ (min)	650	900	1100	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =45℃	If(av)	2.0			A
Peak Forward Surge Current 10ms single half sine-wave superimposed on rated load	Ifsm	50.0			A
Maximum Instantaneous Forward Voltage I_F=1.0A	Vf	1.0			V
non-repetitive peak reverse avalanche energy (Note 1)	E_{RSM}	20			mJ
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta=125℃	Ir	5.0 100			μA
Typical Reverse Recovery Time (Note 2)	Trr	3.0			μS
Typical Junction Capacitance (Note 3)	Cj	50.0			PF
Typical Thermal Resistance (Note 4)	R(ja)	35.0			℃ /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175			℃

Note: 1.L = 120 mH; Tj = Tj max 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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Fig. 1 Maximum average forward curve

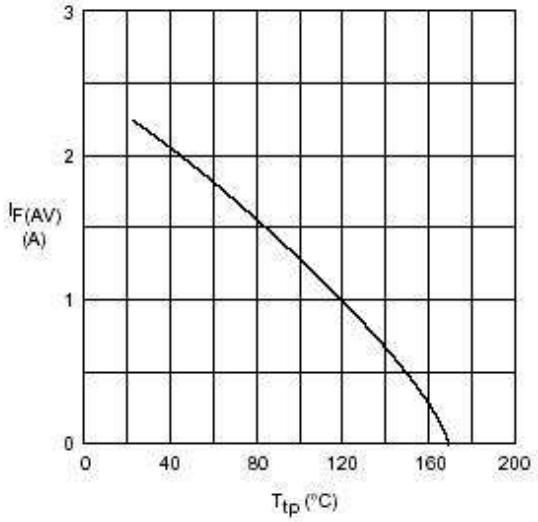

Fig. 2 Forward current as a function of forward voltage

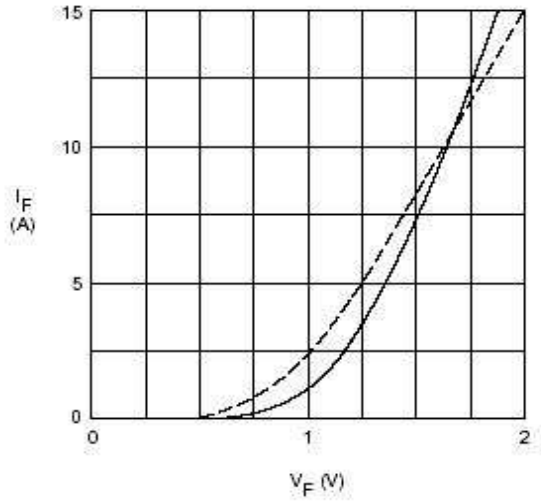

Fig. 3 Maximum permissible average forward current as a function of ambient temperature

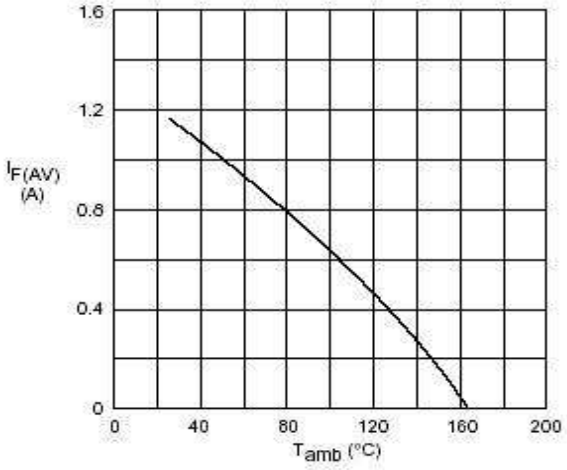

Fig. 4 Reverse current as a function of junction temperature

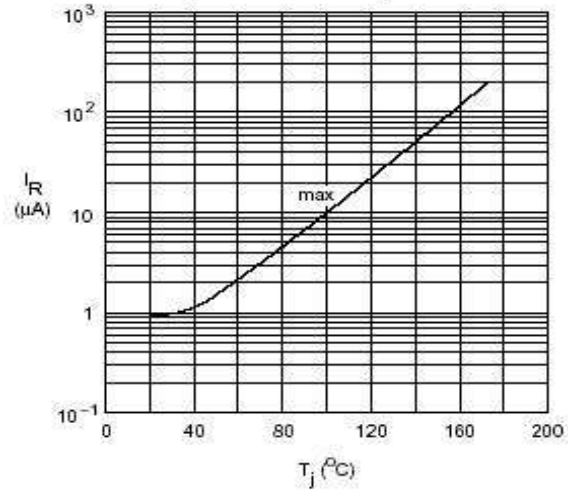

Fig. 5 Diode capacitance as a function of reverse voltage