BYW82GP THRU BYW86GP

SINTERED GLASS JUNCTION PLASTIC RECTIFIER

VOLTAGE:200 TO 1000V **CURRENT: 3.0A**

VOLTARISTECH INC. POWER · PRECISION · INNOVATION

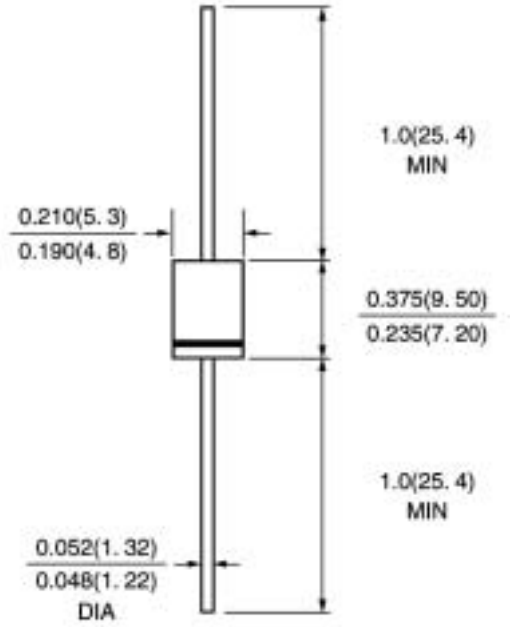
FEATURE

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 =65°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

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	BYW 82GP	BYW 83GP	BYW 84GP	BYW 85GP	BYW 86GP	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	400	600	800	1000	V
Maximum RMS Voltage	Vrms	140	280	420	560	700	V
Maximum DC blocking Voltage	Vdc	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =65°C	If(av)	3.0					A
Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	100.0					A
Maximum Instantaneous Forward Voltage IF=3.0A	Vf	1.0					V
non-repetitive peak reverse avalanche energy (Note 1)	ERSM	20					mJ
Maximum DC Reverse Current Ta =25°C	Ir	5.0					μA
at rated DC blocking voltage Ta =125°C		100.0					μA
Typical Reverse Recovery Time (Note 2)	Trr	4.0					μS
Typical Junction Capacitance (Note3)	Cj	100.0					pF
Typical Thermal Resistance (Note 4)	R(ja)	20.0					°C /W
Storage and Operating Junction Temperature	Tstg, Tj	-65 to +175					°C

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

RATINGS AND CHARACTERISTIC CURVES BYW82GP THRU BYW86GP

FIG. 1 - FORWARD CURRENT DERATING CURVE

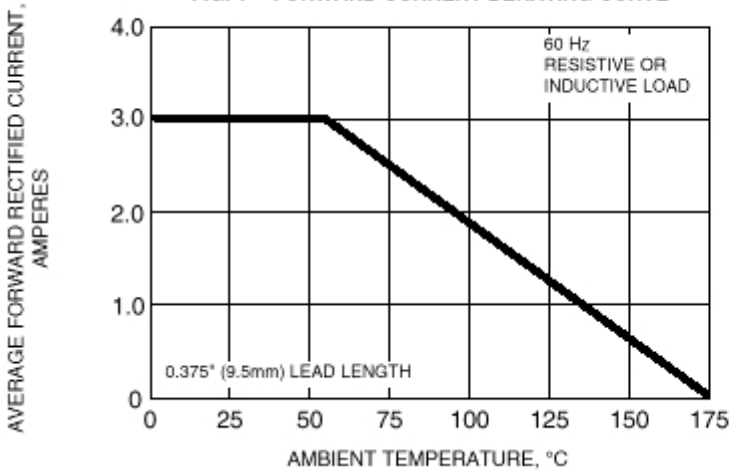


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

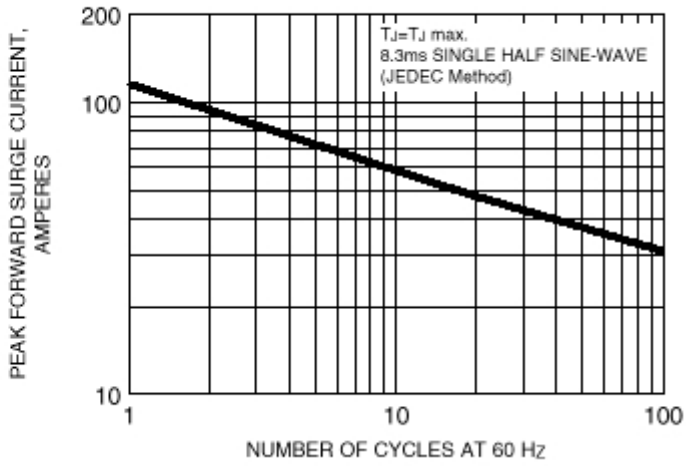


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

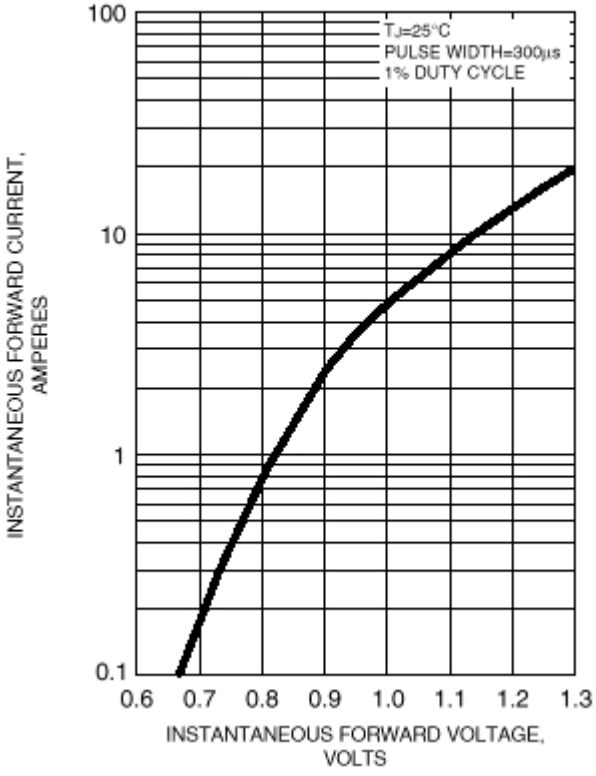


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

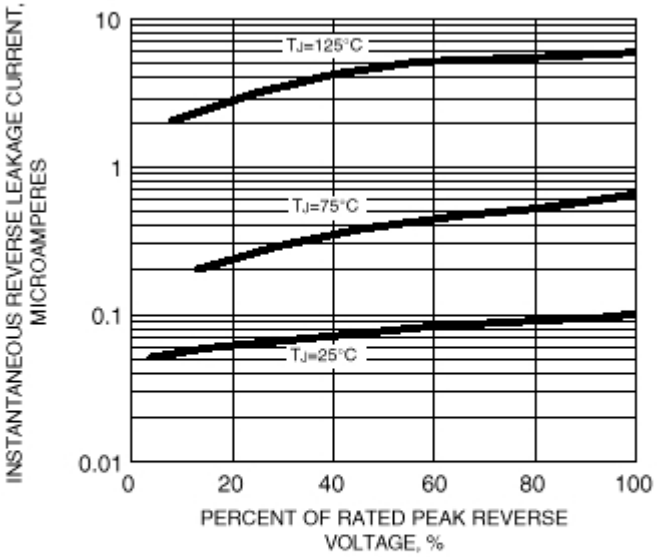
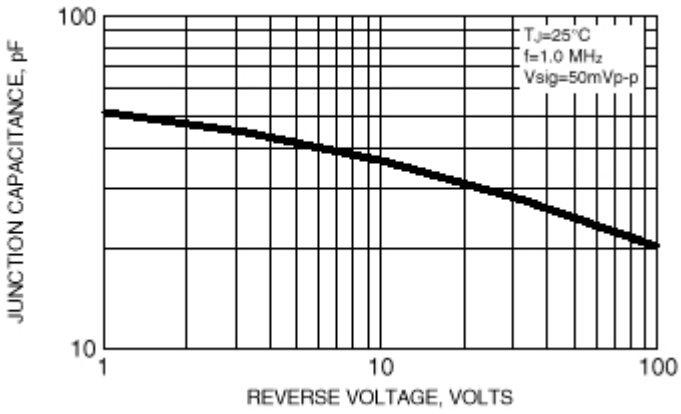


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



[1] Rev.A2, 16-Nov-05