BYW96D THRU BYW96E

SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER

VOLTAGE:800 TO 1000V **CURRENT: 3.0A**

GULF SBMI

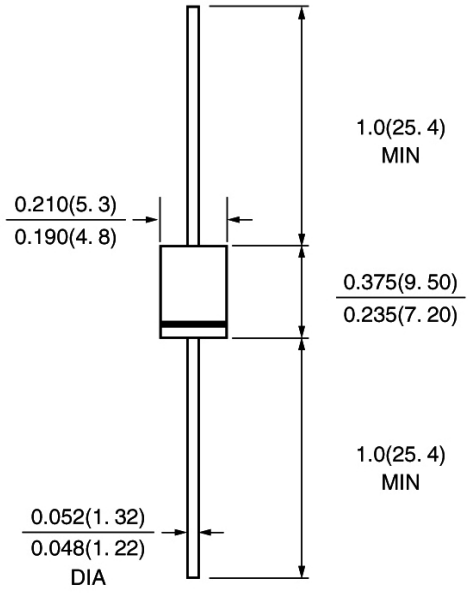
FEATURE

High temperature metallurgic ally 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<0.1μA

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)

	SYMBOL	BYW96D	BYW96E	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	800	1000	V
Maximum RMS Voltage	Vrms	560	700	V
Maximum DC blocking Voltage	Vdc	800	1000	V
Reverse avalanche breakdown voltage at IR = 0.1 mA	$V_{(BR)R}$ (min)	900	1100	V
Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C	If(av)	3.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	70		A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.50		V
Non-repetitive peak reverse avalanche energy (Note 1)	Ersm	10		mJ
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =150°C	Ir	5.0 150		μA μA
Maximum Reverse Recovery Time (Note 2)	Trr	300		nS
Typical Junction Capacitance (Note 3)	Cj	60		pF
Typical Thermal Resistance (Note 4)	R(ja)	16		°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

RATINGS AND CHARACTERISTIC CURVES BYW96D THRU BYW96E

[1]

FIG. 1 - FORWARD CURRENT DERATING CURVE

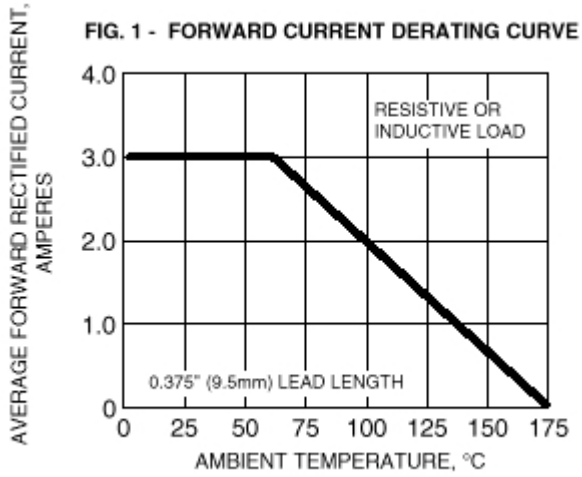


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

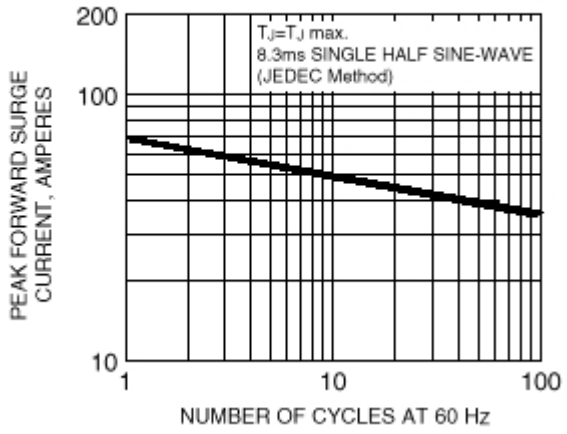


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

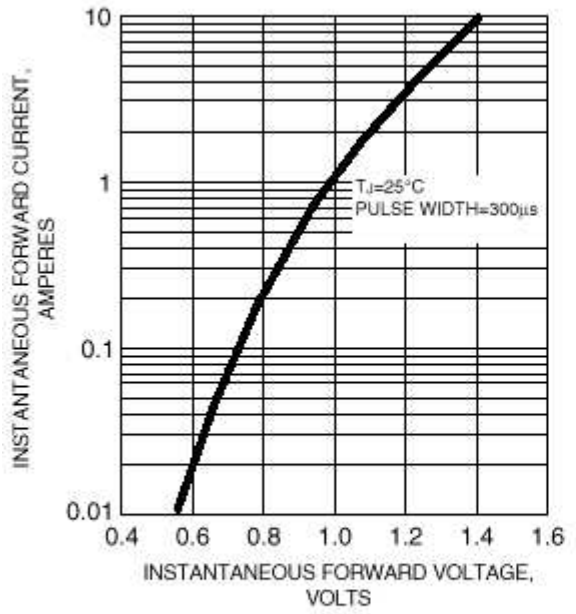


FIG. 4 - TYPICAL REVERSE CHARACTERISTIC

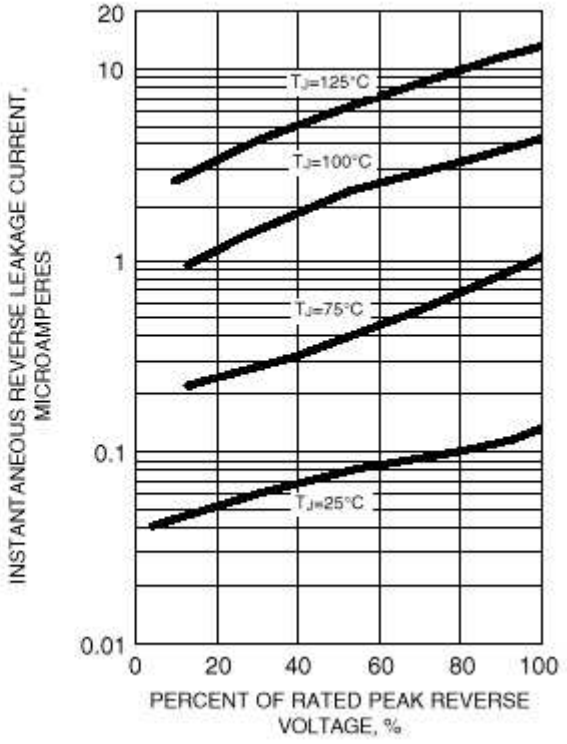
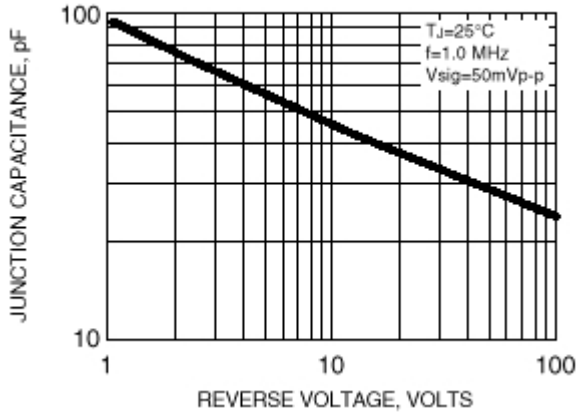


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



[1] Rev.A1