

BYV95AGP THRU BYV95CGP

SINTERED GLASS JUNCTION
FAST SWITCHING PLASTIC RECTIFIER
VOLTAGE: 200 TO 600V CURRENT: 1.5A



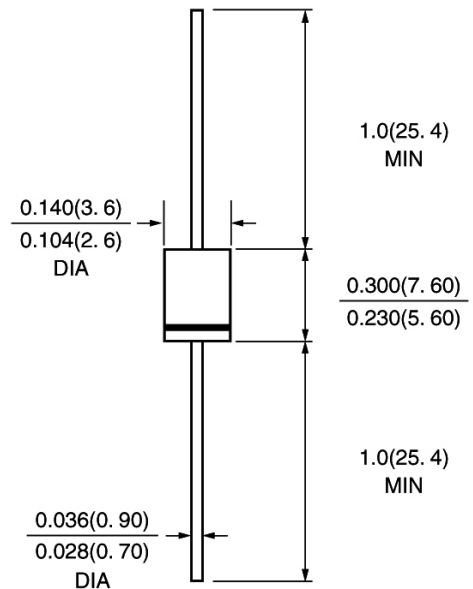
FEATURE

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 $T_a = 55^\circ\text{C}$ with no thermal run away
Typical $I_r < 0.1\mu\text{A}$

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

DO-15\DO-204C



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	BYV 95AGP	BYV 95BGP	BYV 95CGP	units
Maximum Recurrent Peak Reverse Voltage	V_{rrm}	200	400	600	V
Maximum RMS Voltage	V_{rms}	140	280	420	V
Maximum DC blocking Voltage	V_{dc}	200	400	600	V
reverse avalanche breakdown voltage at $I_r = 0.1\text{ mA}$	$V_{(BR)R}$ (min)	300	500	700	V
Maximum Average Forward Rectified Current 3/8" lead length at $T_a = 65^\circ\text{C}$	$I_{f(av)}$	1.5			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{fsm}	35.0			A
Maximum Forward Voltage at rated Forward Current and 25°C $I_F = 3\text{A}$	V_f	1.60			V
non-repetitive peak reverse avalanche energy (Note 1)	E_{rsm}	10			mJ
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at rated DC blocking voltage $T_a = 150^\circ\text{C}$	I_r	5.0 150			μA μA
Maximum Reverse Recovery Time (Note 2)	T_{rr}	250			nS
Typical Junction Capacitance (Note 3)	C_j	45.0			pF
Typical Thermal Resistance (Note 4)	$R_{(ja)}$	46.0			$^\circ\text{C/W}$
Storage and Operating Junction Temperature	T_{stg}, T_j	-65 to +175			$^\circ\text{C}$

Note: 1. $L = 120\text{ mH}$; $T_j = T_j$ max prior to surge; inductive load switched off
2. Reverse Recovery Condition $I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$
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

FIG. 1 - FORWARD CURRENT DERATING CURVE

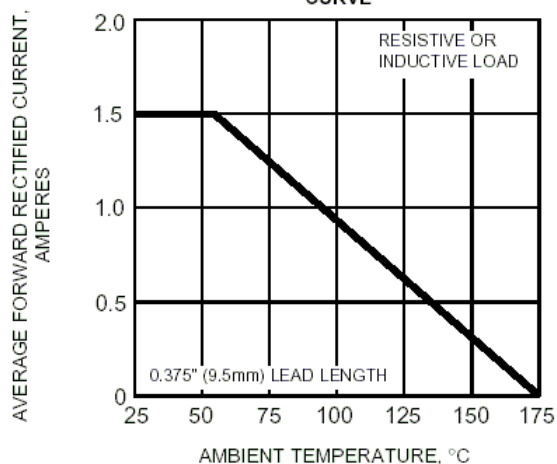


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

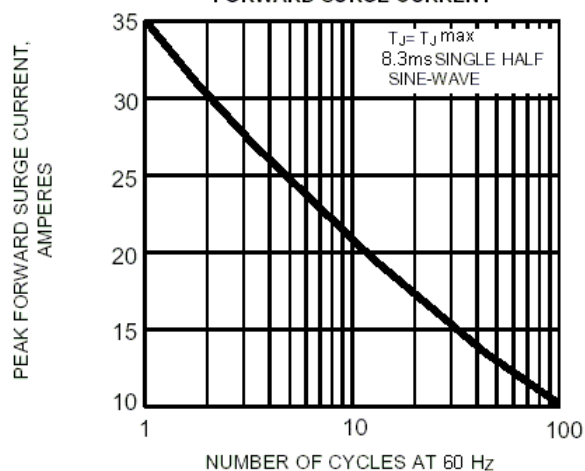


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

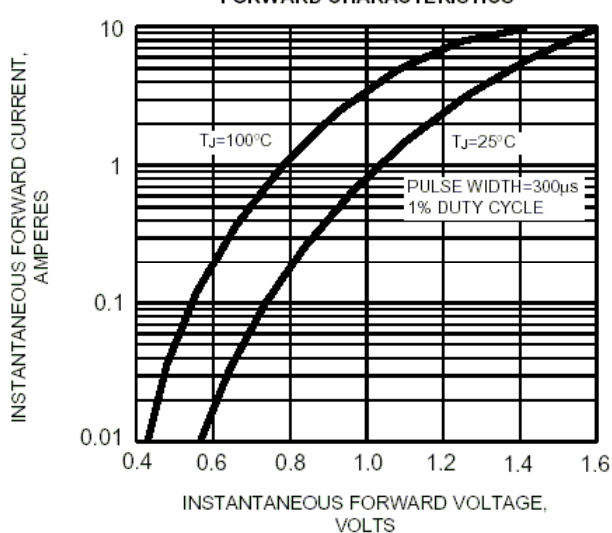


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

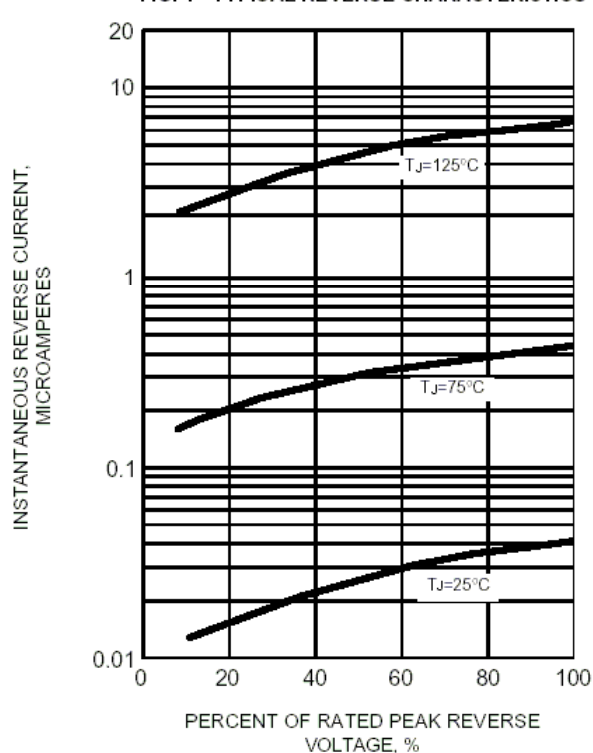


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

