

# BYV95AGP THRU BYV95CGP

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



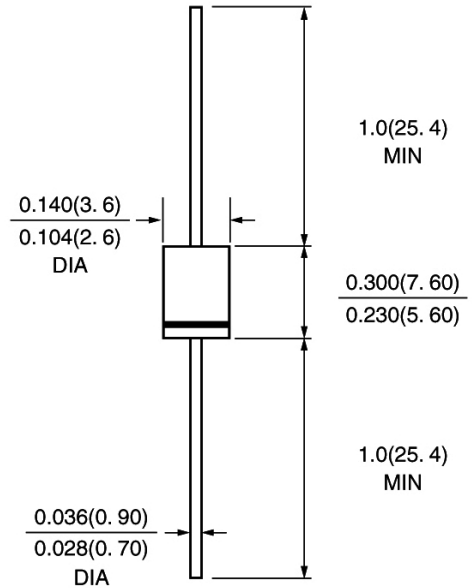
## FEATURE

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		$\mu\text{A}$ $\mu\text{A}$
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		$^\circ\text{C}/\text{W}$
Storage and Operating Junction Temperature	$T_{stg}, T_j$		-65 to +175		$^\circ\text{C}$

Note: 1.  $L = 120 \text{ mH}$ ;  $T_j = T_j \text{ max}$  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

RATINGS AND CHARACTERISTIC CURVES BYV95AGP THRU BYV95CGP

FIG. 1 - FORWARD CURRENT DERATING CURVE

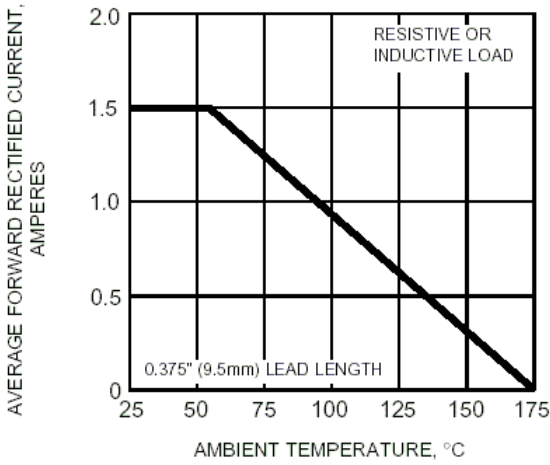


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

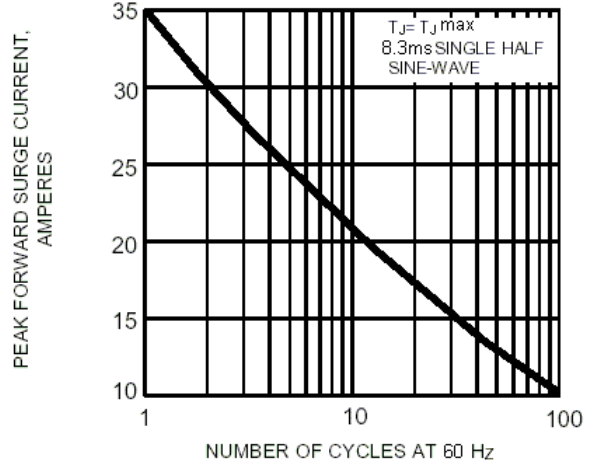


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

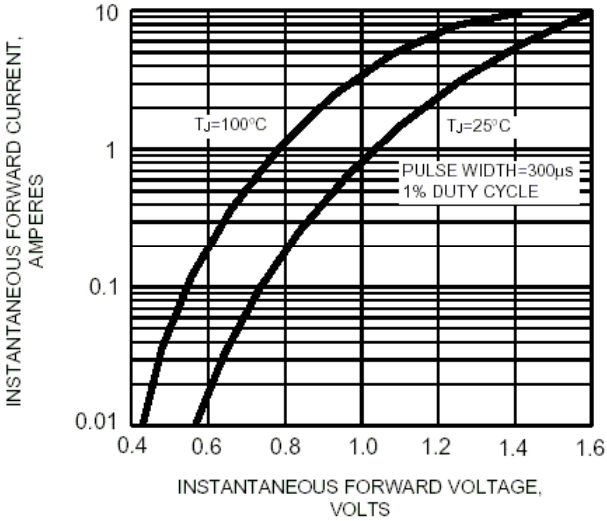


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

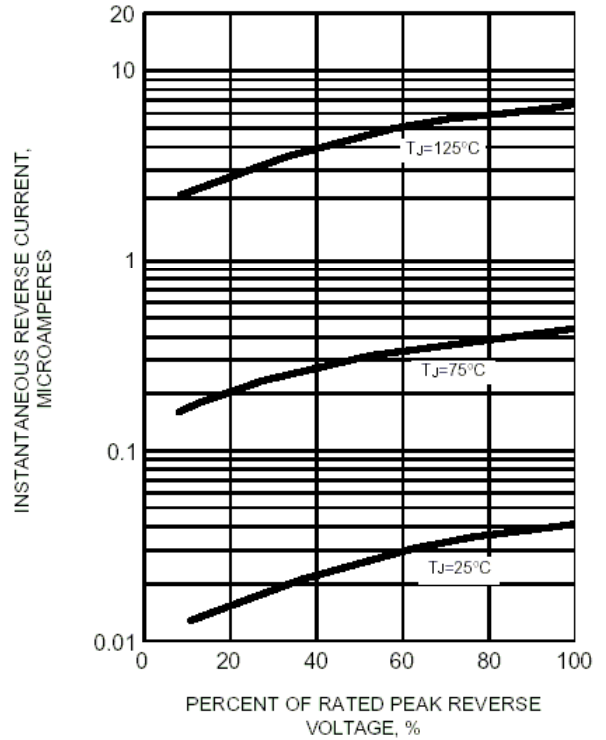


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

