

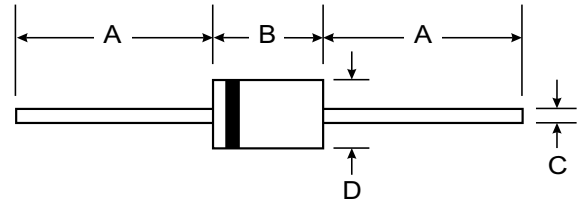
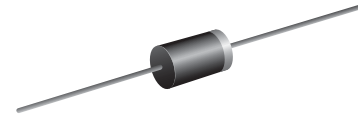
**VOLTAGE RANGE: 200 - 1000V**  
**CURRENT: 1.5 A**

### Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency

### Mechanical Data

- Case : DO-15 Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.465 gram



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		



### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	BYV95A	BYV95B	BYV95C	BYV96D	BYV96E	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	200	400	600	800	1000	Volts
Min. Avalanche Breakdown Voltage @ 100 $\mu\text{A}$	$V_{BR(min.)}$	300	500	700	900	1100	Volts
Maximum Average Forward Rectified Current Lead Length 10 mm. ; $T_{tp} = 65^\circ\text{C}$	$I_{F(AV)}$	1.5					Amps.
Peak Forward Surge Current single half sine wave superimposed on rated load	$I_{FSM}$	35					Amps.
Maximum Forward Voltage at $I_F = 3.0$ Amps.	$V_F$	1.6					Volts
Maximum DC Reverse Current $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage $T_J = 165^\circ\text{C}$	$I_R$	5.0					$\mu\text{A}$
		150					
Maximum Reverse Recovery Time ( Note 1 )	$T_{rr}$	150			200		ns
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	50					$^\circ\text{C}/\text{W}$
Junction Temperature Range	$T_J$	175					$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 65 to + 175					$^\circ\text{C}$

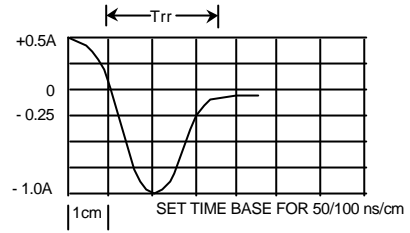
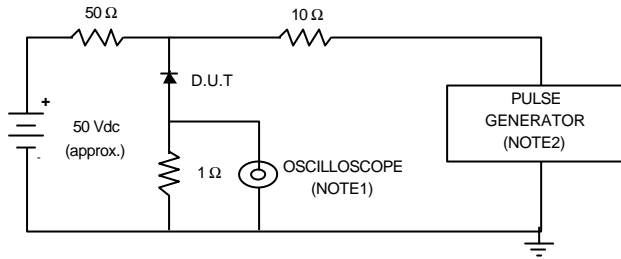
#### Notes :

(1) Measured with  $I_F = 0.5\text{A}$ ,  $R = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$

(2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths. P.C. Board Mounted.

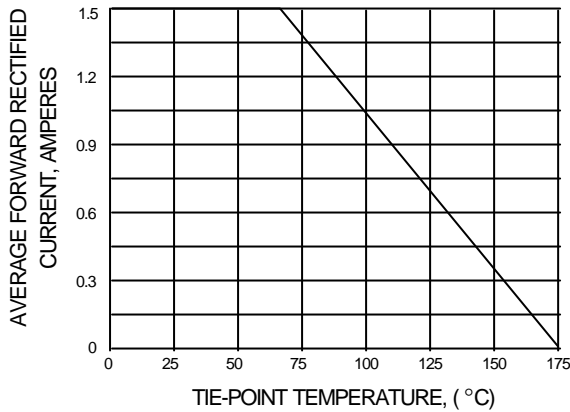
## RATING AND CHARACTERISTIC CURVES ( BYV95A - BYV96E )

**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**

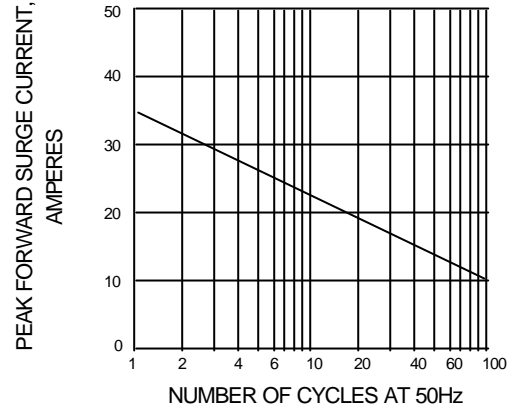


NOTE : 1. Rise Time = 7ns max., Input Impedance = 1 megaohm, 22pF.  
 2. Rise Time = 10ns max., Source Impedance = 50 ohms.  
 3. All Resistors = Non-inductive Types.

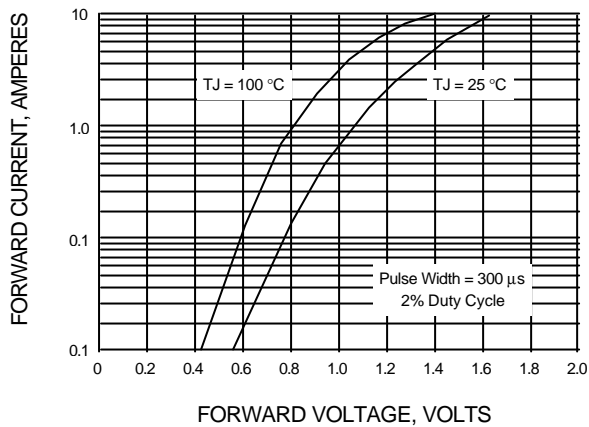
**FIG.2 - FORWARD CURRENT DERATING CURVE**



**FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

