

C V493

Specification MAP/CV.493 Issue 3 Dated 20.3.1952 To be read in conjunction with K.1001	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - High Vacuum, Full Wave Rectifier CATHODE - Indirectly Heated ENVELOPE - Glass, unmetallised PROTOTYPE - 6X4		<u>MARKING</u> See K.1001/4			
		<u>BASE</u> B7G			
<u>RATING</u>		Note	<u>CONNECTIONS</u>		
Heater Voltage (V)	6.3		Pin	Electrode	
Heater Current (A)	0.6		1	A (b)	
Max. Peak Inverse Voltage (V)	1375	A	2	No connection	
Max. Mean Anode Current (mA)	75	A	3	H	
Max. Peak Anode Current (mA)	230	A	4	H	
Max. Surge Anode Current (mA)	750		5	No connection	
Max. Heater Cathode Voltage (V)	450	A,B	6	A (a)	
			7	C	
			<u>DIMENSIONS</u> See K.1001/A1/D4		
			Dimensions	Min.	Max.
			A mm	-	67
			B mm	-	19.05
			L mm	-	60.0

NOTE

- A. Absolute maximum values.
- B. This figure applies with heater positive or negative with respect to cathode.

To be performed in addition to those applicable in K.1001

	Test Conditions		Test	Limits		No. Tested	Note
				Min.	Max.		
	Vh (V)	Va (V)					
a	6.3	0	Ih (A)	0.54	0.66	100% or 3	
b	6.3	50 DC (max)	Ia (mA)	140	-	100%	1
c	6.3	-	1. Output Current (mA) 2. Run for 1 min. and reject for softness or persistent flashover.	70	-	100%	

Input Voltage = 400-0-400V, RMS; Frequency = 50 c/s; Load Resistance = 5700 ohms; Reservoir Condenser = 8 $\mu$ F; Effective Resistance per Anode introduced externally shall be such that a valve which gives a voltage drop of 22V when passing 70mA per anode, shall give an output current of 75mA

NOTE

1. Test to be performed on each anode separately.

# DATA SHEET

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Valve Electronic Type **CV 493**

## TYPICAL OPERATING CONDITIONS

### Full Wave Rectifier - Condenser Input Filter

A.C. Anode Voltage (rms) per anode	250	275	300	325	Volts
Limiting resistance per anode	250	250	250	250	Ohms
Reservoir Condenser	4	4	4	4	mfd
D.C. Output Current	70	70	70	70	mA
D.C. Output Voltage	237	270	300	333	Volts

### Full Wave Rectifier - Choke Input Filter

A.C. Anode Voltage (rms) per anode	250	350	450	Volts
Input Choke Inductance	8	8	8	Henries
D.C. Output Current	70	70	70	mA
D.C. Output Voltage *	190	280	375	Volts

\* This does not include voltage drop in the input choke

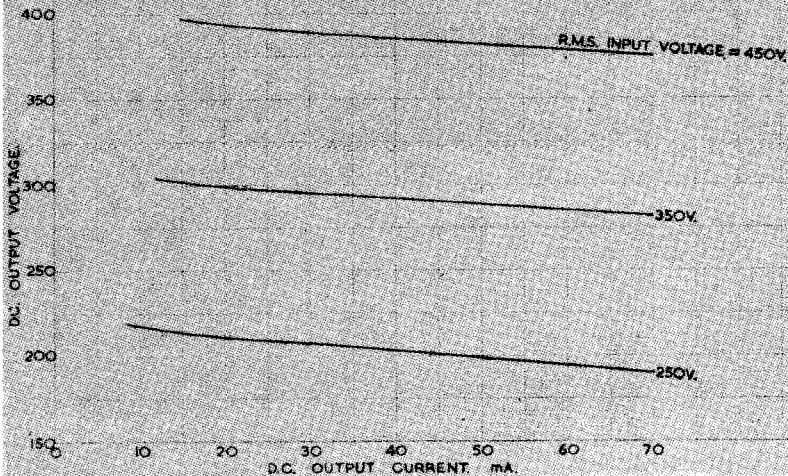
Mounting Position - Any

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FULL WAVE RECTIFIER

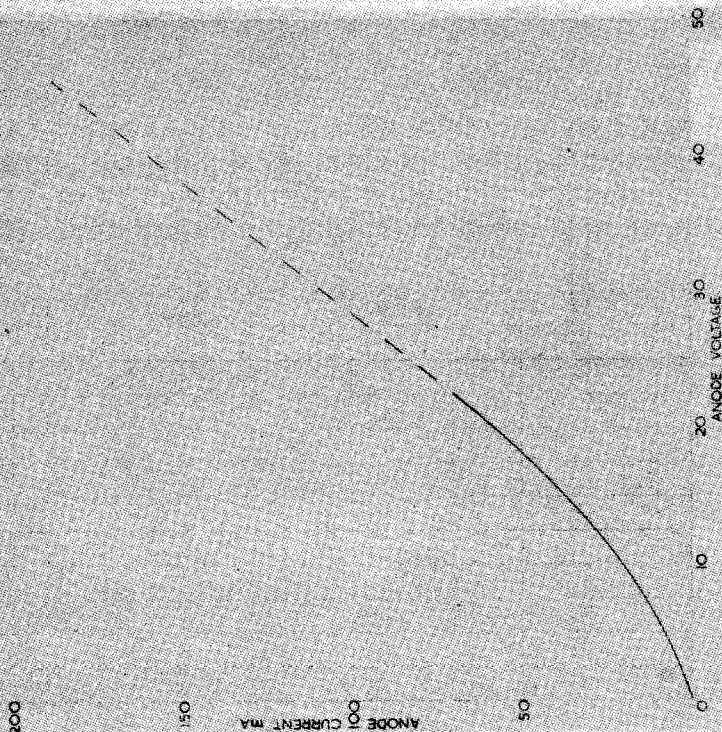
$V_f = 6.3$  VOLTS

CHOKE INPUT FILTER MINIMUM INDUCTANCE = 8 HENRIES



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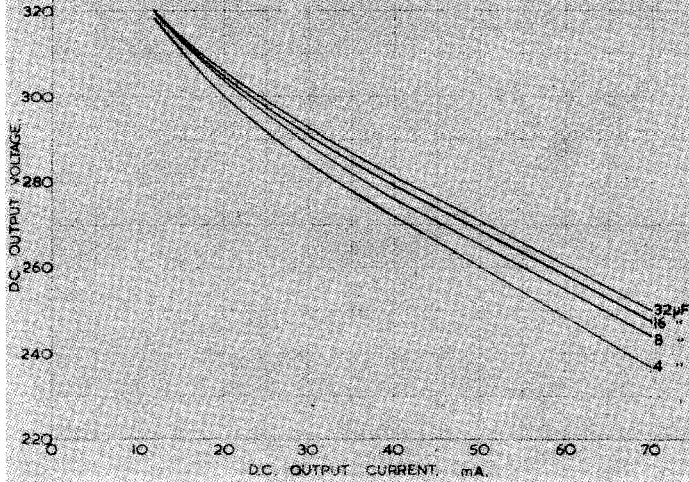
$V_f = 6.3$  VOLTS  
EACH DIODE



# DATA SHEET

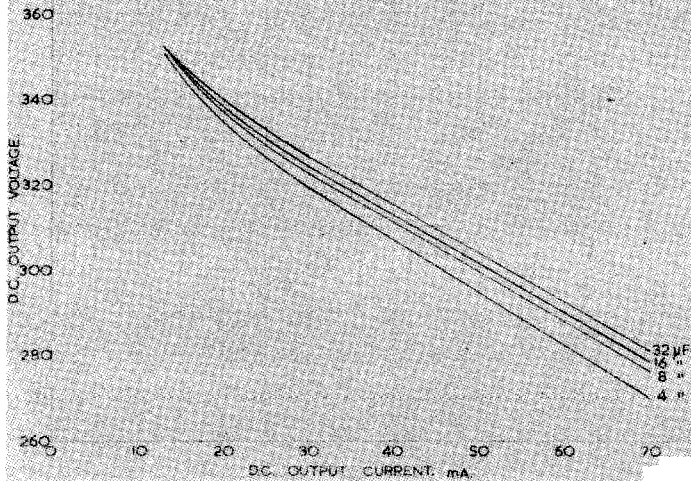
## CV493

FULL WAVE RECTIFIER.  
 $V_f = 6.3$  VOLTS.  
 R.M.S. INPUT VOLTAGE = 250V.  
 LIMITING RESISTOR EACH ANODE = 250 $\Omega$ .



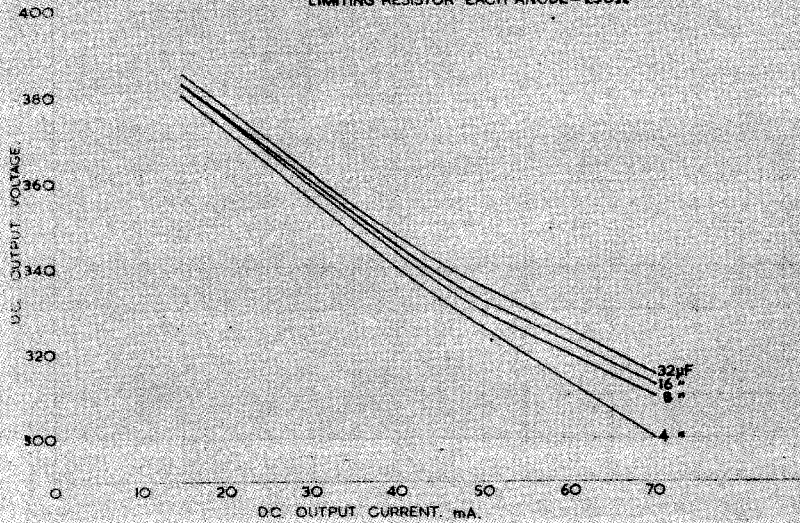
## CV493

FULL WAVE RECTIFIER.  
 $V_f = 6.3$  VOLTS.  
 R.M.S. INPUT VOLTAGE = 275V.  
 LIMITING RESISTOR EACH ANODE = 250 $\Omega$ .



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FULL WAVE RECTIFIER.  
 $V_f = 6.3$  VOLTS.  
 R.M.S. INPUT VOLTAGE = 300V.  
 LIMITING RESISTOR EACH ANODE = 250 $\Omega$ .



## CV493

FULL WAVE RECTIFIER.  
 $V_f = 6.3$  VOLTS.  
 R.M.S. INPUT VOLTAGE = 325V.  
 LIMITING RESISTOR EACH ANODE = 250 $\Omega$ .

