

Specification MOS(A)/CV2296 Issue 2 Dated 28. 4. 55 To be read in conjunction with K1001 & BS.448	<u>SECURITY</u>	
	<u>Specification</u>	<u>Valve</u>
	UNCLASSIFIED	UNCLASSIFIED

Indicates a change.

TYPE OF VALVE - Gas-filled Tetrode CATHODE - Cold ENVELOPE - Glass - Unmetallised PROTOTYPE - NSP 2		<u>MARKING</u>	
		See K1001/4.	
<u>RATING</u>		<u>BASE</u>	
		Octal BS.448 : B8-0	
		<u>CONNECTIONS</u>	
		<u>Pin</u>	<u>Electrode</u>
		1	No connection
		2	No connection
		3	Anode
		4	Screen Grid
		5	Control Grid
		6	Pin omitted
		7	No connection
		8	Cathode
		<u>DIMENSIONS</u>	
		See K1001/A1/D1.	
		<u>Dimension (mms)</u>	<u>Min.</u> <u>Max.</u>
		A	- 103
		B	- 32
		L	- 89
		<u>MOUNTING POSITION</u>	
		Any	
<u>STARTING CHARACTERISTICS</u> (See Note E)			
Min. Trigger Current (V _a = 380V) (μA)	50	A	
Min. Trigger Current (V _a = 200V) (μA)	300	A	
Max Delay Time (μsecs)	40	B	
		C	
		D	
		F	
		G	
<u>TYPICAL OPERATING CONDITIONS</u>			
DC Supply Voltage (V)	330		
Screen Grid Voltage (V)	70		
Trigger Pulse Amplitude (V)	70		
Charging Resistor (ohms)	3000		
Discharge Capacitor (μF)			
for operation at (c/s)			
6 - 35	4		
30 - 50	3		
45 - 80	2		
80 - 150	1		
140 - 250	0.5		

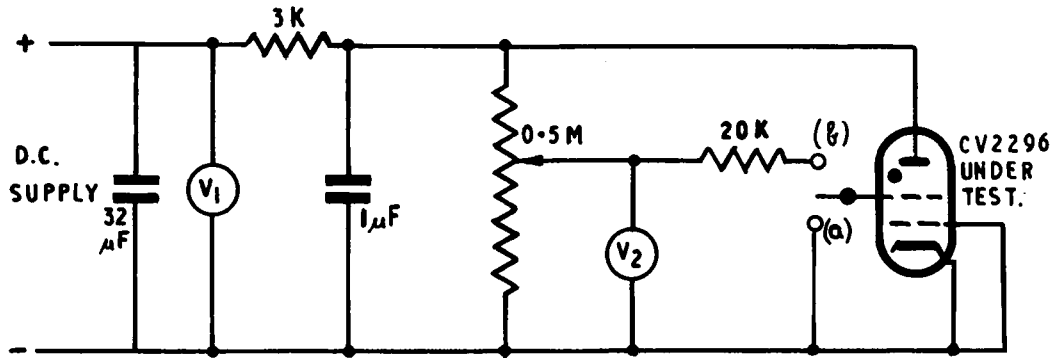
NOTES

- A. DC Supply Voltage.
- B. A minimum of 5 amps is necessary for the formation of an arc discharge with a tube drop of approximately 20 volts. If the main gap current is less than 5 amps peak, a glow discharge is likely to form with a 70 volt drop and result in excessive cathode dissipation.
- C. Limitation due to heating of cathode, dependent on peak current and duty cycle.
- D. For triggering between screen and grid.
- E. With control grid 80 - 130 volts negative with respect to screen grid.
- F. Less than 40 usecs dependent on circuit conditions. With higher energy pulses the delay time can be considerably reduced.
- G. Negative with respect to screen voltage.

To be performed in addition to those applicable in K1001

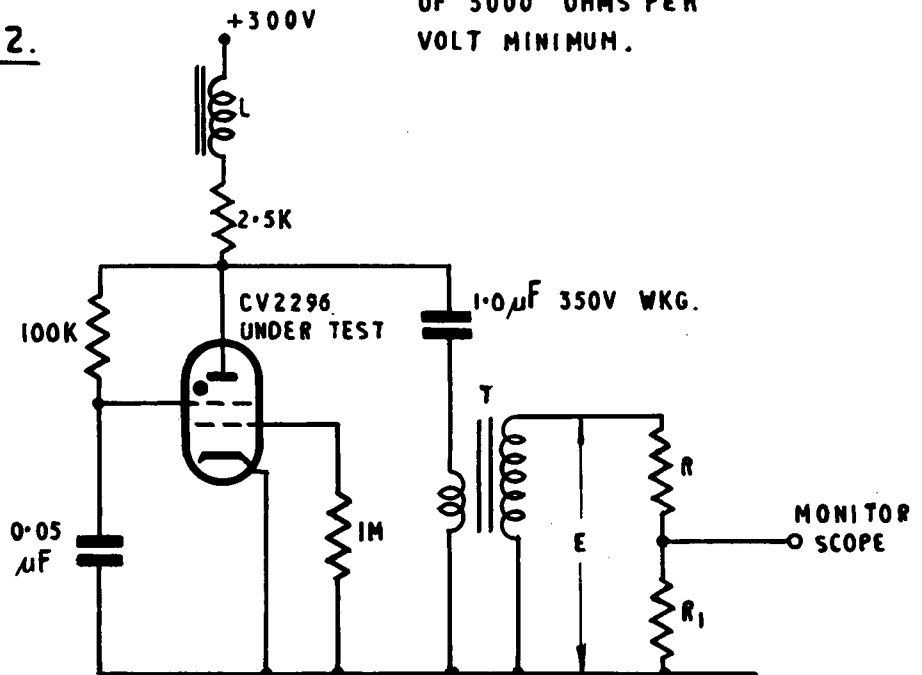
Test Conditions	Test	Limits		No. Tested	Note
		Min.	Max.		
a → With the valve operating in the test circuit shown in Fig. 1 on Page 4, and switch set to position (a), 330V DC shall be applied across the reservoir condenser.	<u>Anode-Screen Grid Breakdown Voltage</u> (V)	330	-	100%	
b As for Test (a) but switch in position (b); 330V DC shall be applied across the reservoir condenser. The screen grid voltage shall be increased until the valve fires.	<u>Screen Grid Starting Potential</u> Screen grid breakdown potential measured just before conduction starts. (V)	80	130	100%	
c The valve shall be operated in the test circuit shown in Fig. 2 on Page 4.	Life (hrs)	300	-	TA	

FIG. 1. TEST CIRCUITS FOR CV.2296



V₁ - MOVING COIL METER
 V₂ - MOVING COIL METER
 OF 5000 OHMS PER
 VOLT MINIMUM.

FIG. 2.



CHOKE L AND TRANSFORMER T ARE CONTAINED IN TRANSFORMER-
 TYPE 2932 (A.M. REF. 10K/16995)

CV2296/2/4