MINISTRY OF SUPPLY - D.L.R.D./R.A.E.

VALVE ELECTRONIC **CV2798**

Specification MOS(A)/CV2798	SECURITY	
	Specification	Valve
Issue 1 Dated 1.6.57.		
To be read in conjunction with B.S.448, B.S.1409 and K.1001	UNCLASSIFIED	UNCLASSIFIED

TYPE OF VALVE - R.F. Power Double Tetrode

CATHODE - Indirectly Heated

ENVELOPE - Glass, unmetallised

PROTOTYPE - QQV03-10

MARKING

See K.1001/4

BASE

B.S. 448/B9A

RATING
(All limiting values are absolute)

			Note
Heater Voltage (parallel)	(V)	6.3	
Heater Current (parallel)	(A)	0.84	
Heater Voltage (series)	(V)	12.6	
Heater Current (series)	(A)	0.42	
Max. Operating Anode Voltage	(V)	300	
Max. Operating Screen Voltage	(V)	200	
Max. Anode Dissipation	(W)	5	B,C,D
Max. Screen Dissipation	(W)	1.0	C
Max. Grid Dissipation	(W)	0.2	C
Max. Negative Grid Voltage	(V)	150	
Max. D.C. Cathode Current	(mA)	50	C
Max. Peak Cathode Current	(mA)	225	C
Max. Intermittent Peak Cathode Current with A.M.	(mA)	360	C
Max. Heater - Cathode Voltage	(V)	100	
Max. Operating Frequency	(Mc/s)	225	

CONNECTIONS

Pin	Electrode	
1	Grid (1)	g'1
2	Cathode	k
3	Grid (2)	g"1
4	Heater	h
5	Heater	h
6	Anode (1)	a'
7	Screen (Com)	g2
8	Anode (2)	a"
9	Heater C.T.	h (tap)

DIMENSIONS

Dimensions (mm)	Min.	Max.
A seated height	-	71.5
C diameter	-	22.2
D overall length	-	78.5

CAPACITANCES (pF)

C in	6.2	C,D
C out	2.7	C,D
C in (both sections in push pull)	5.0	A,D
C out (both sections in push pull)	1.5	A,D

MOUNTING POSITION

Any, but when mounted horizontally pins 2 and 7 should be in a Vertical plane.

NOTES

A. The valve is internally neutralized for push-pull operation

B. Cooling is by radiation and convection; maximum bulb temperature = 225°C; maximum temperature of pins = 120°C.

C. Per section.

D. Without screen.

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TESTS

To be performed in addition to those applicable in K1001

	Test Conditions					Tests	Limits Min.	Limits Max.	No. Tested	Note
a	Measured on a 1 Mc/s bridge with valve mounted in a fully shielded holder. Valve not screened					CAPACITANCES (pF)				
						C in	5.7	6.7	6 per week	1
						C out	2.35	3.6		
						Ca, gl	-	0.08		
						Ca', g"1	-	0.08	6 per week	
						Ca", g'1	-	0.08		
						Cgl', g"1	1.8	2.2		
						Ca', a"	0.08	0.12		
b	Vh (V)	Va (V)	Vg2 (V)	Vgl (V)	Ia (mA)					
	6.3	0	0	0	0	Heater Current (A)	0.78	0.88	100% or S	
c	6.3	150	150	Adjust	40	Reverse Grid Current (μA)	-	1.3	100%	1,2
d	6.3	200	200	-45	-	Anode Current (1) (mA)	-	1.5	100%	3
e	6.3	200	200	-15	-	Anode Current (2) (mA)	13	62	100%	3
f	6.3	200	200	Adjust	30	Screen Current (mA)	-	5.0	100%	3
g		See K1001/5.3 except ± 100V shall be applied between heater and cathode.				Heater Cathode Leakage (μA)	-	40	100%	
h	6.3	300	200	Adjust	75	Power out at 150 Mc/s (W)	10	-	20 per week	4

NOTES

1. Per section
2. Read after 3 minutes operation
3. Test each section separately, the other section being biassed to -100V negative.
4. Rgl variable between 5 K.ohms and 55 K.ohms. A typical circuit diagram is shown on page 3.

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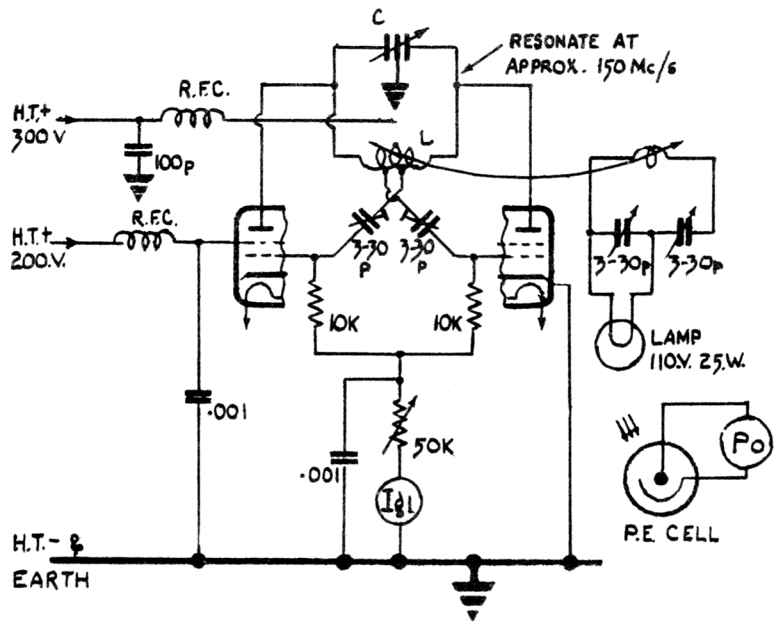
POWER OUTPUT TEST CIRCUIT.



NOTE. TEST CONDITIONS ARE :-

Ia = 75mA, Ig2 = 3-4mA. AVERAGE

Ig1 = 2mA AVERAGE, Vg = 6·3.

Po = 10 WATTS MINIMUM

Rg1 = 5-50K.