VALVE ELECTRONIC CV 1941
(NR81/6K7G)

MINISTRY OF SUPPLY (S.R.D.E.)

Specification MOS/CV1941/Issue 5 Dated:- 5.9.46 To be read in conjunction with K1001.	SECURITY Specification: Restricted Valve: Unclassified

——→indicates a change

TYPE OF VALVE:- Variable - mu H.F. pentode
CATHODE :- Indirectly heated
ENVELOPE:- Glass - unmetallised
PROTOTYPE:- 6K7G

MARKING
See K1001/4
Additional marking :- 6K7G

RATING

			Note
Heater volts		6.3	
Nominal heater current	(A)	0.3	
Max. anode volts		300	
Max. screen volts		125	
Max. anode dissipation	(W)	2.75	
Max. screen dissipation	(W)	0.35	
Mutual conductance	(mA/V)	1.45	A
Anode impedance	(M)	0.8	A
Anode current	(mA)	7.0	A
Screen current	(mA)	1.7	A
Grid bias for mutual conductance of 2 uA/V	(V)	-42.5	C
CAPACITANCES (pF)			
Cag		0.0035	B
Cae		12.0	B
Cge		5.0	B

BASE
IO

Pin	Electrode
1	No connection
2	Heater
3	Anode
4	Screen grid
5	Suppressor grid
6	Pin omitted
7	Heater
8	Cathode
TC	Control grid

TOP CAP
See K1001/AI/D5.2

DIMENSIONS
See K1001/AI/D1

Dimension	Min.	Max.
A mm	105	114
B mm	-	40

NOTES

A. At Va = 250V, Vg_1 = -3V, Vg_2 = 100V, Vg_3 = 0.
B. Taken with conventional shield.
C. At Va = 250V, Vg_2 = 100V, Vg_3 = 0.

CV1941

TESTS

To be performed in addition to those applicable in K1001.

	Test conditions					Test	Limits Min.	Limits Max.	No. tested
a	See K1001/AIII					Capacitances (pF)			
	Links to H.P.		Links to L.P.		Links to E				
	3		TC_1		1,2,4,5,6,7,8,9,10, TC_2	(i) Cag	-	0.007	T.A.
	3		1,2,4,5,7,8		6,9,10, TC_1, TC_2	(ii) Cae	8.0	14.5	6 per week
	TC_1		1,2,4,5,7,8		3,6,9,10, TC_2	(iii) Cge	4.0	6.0	
	Vh	Va	Vg_3	Vg_2	Vg_1				
b	6.3	0	0	0	0	Ih (A)	0.27	0.33	100% or S
c	6.3	250	0	100	-3	Ia (mA)	4.9	9.5	100%
d	6.3	250	0	100	-3	Ig_2 (mA)	0.9	2.5	100% or S
e	6.3	250	0	100	-3	gm (mA/V)	1.1	1.9	100%
f	6.3	250	0	100	-3	Rev Ig (uA)	-	1.0	100%
g	6.3	250	0	100	-30	Ia tail (uA)	50	500	100%