MINISTRY OF SUPPLY (D.L.R.D.(A)/R.A.E.

VALVE ELECTRONIC CV686

Specification MAP/CV.686 Issue 2 Dated 16.1.52 To be read in conjunction with K.1001	SECURITY	
	Specification	Valve
	UNCLASSIFIED	UNCLASSIFIED

——► Indicates a change

TYPE OF VALVE - Voltage Stabiliser
CATHODE - Cold
ENVELOPE - Glass, unmetallised
PROTOTYPE - CC3/VR105/30

MARKING

See K.1001/4

BASE

I.O.
See K.1001/AIV/D2
M Dimension (iii) applies

RATINGS

		Note
Max. Striking Voltage (V)	127	
Operating Voltage (approx) (V)	105	
Min. Operating Current (mA)	5	
Max. Operating Current (mA)	40	

CONNECTIONS

Pin	Electrode
1	No connection
2	Cathode
3	Connected internally to pin 7
4	Pin omitted
5	Anode
6	Pin omitted
7	Connected internally to pin 3
8	No connection

DIMENSIONS

See K.1001/A1/D1

Dimension	Min.	Max.
A	96	105
B	-	40

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

	Test Conditions		Test	Limits		No. Tested	Note
				Min.	Max.		
	Va(V)	Ia(mA)					
a	Increased from zero until Ia flows	-	Striking Voltage (V)	-	127	100%	1 & 2
b	Adjusted	40	Va (V)	-	112	100%	2
c	Adjusted	30	Va (V)	-	111	1% (5)	2
d	Adjusted	5	Va (V)	105	-	100%	2
e	50	-	Leakage Current (μA)	-	10.0	1% (5)	2
f	Impedance (i) Difference between value of Va in test "b" and value in test "d" (V)			-	4.0	100%	
	(ii) Difference between value of Va in test "c" and value in test "d" (V)			-	2.0	1% (5)	
g	Noise Test The valve is to be tested for freedom from oscillation and noise during operation. For this purpose a calibrated amplifier detector having a level response within ± 2 db. of its response at 400 c.p.s. over the range of 50-5000 c.p.s. is to be connected between the Anode and Cathode. The Cathode current is to be varied slowly from 5 mA. to 40 mA. and at no point in this range must the R.M.S. noise input voltage to the amplifier exceed 10 mV. For the purpose of the test the valve shall be operated from a well filtered variable D.C. supply. 100%						

NOTES

1. This test is to be performed at 24 hours after the valve is sealed off.

2. With a minimum resistance of 1K ohms in series with the anode.