MINISTRY OF AIRCRAFT PRODUCTION (D.C.D.)

VALVE ELECTRONIC CV1120

(VU120)

Specification MAP/CV1120/Issue 7
Dated 8.1.46.
To be read in conjunction with K1001 ignoring clauses:-5.2,5.8.

SECURITY	
Specification	Valve
RESTRICTED	RESTRICTED

→ Indicates a change

TYPE OF VALVE - High Vacuum Half-Wave Rectifier

CATHODE - Indirectly Heated

ENVELOPE - Glass-unmetallised

MARKING

See K1001/4 ←

RATING		Note
Heater Voltage (V)	2.0	
Heater Current (A)	1.5	
Max. Applied R.M.S. Voltage (V)	5,000	
Max. Working Peak Inverse Voltage (V)	14,000	
Max. No Load Peak Inverse Voltage (V)	15,000	
Max. Mean D.C. Rectified Current (mA)	5.0	
Max. Peak Anode Current (mA)	100	
Max. Reservoir Condenser (μF)	0.25	
Min. Limiting Resistance Introduced Externally (Ω)	10,000	

BASE

B.4.

Pin	Electrode
1	No connection
2	No connection
3	Heater and Cathode
4	Heater
T.C.	Anode

PLUG TOP CAP

See K1001/AI/D5.1

DIMENSIONS

See K1001/AI/D1

Dimensions		Min.	Max.
A	(mm)	120	134
B	(mm)	-	51

Base shell diameter not to exceed 33mm. for a height of 6.5mm. from the bottom of the base moulding.

NOTE

A:- Ratings apply to condenser filter and 50 c.p.s. supply.

To be performed in addition to those applicable in K1001

	Test Conditions		Test	Limits		No. Tested	Note
	Vh	Va		Min.	Max.		
a	2.0V. AC.or DC.	-	Ih (A)	-	2.2	100% or S	
b	2.0V. AC.or DC.	200V.D.C.Max.	Ia (mA)	50	-	100%	1
c	2.0V. A.C.	Input Voltage 5000V. R.M.S. Frequency 50cps. D.C.Load 5mA. (nom.) Reservoir Condenser 0.25/uF Effective Resistance per anode introduced externally 10,000Ω	Load Test Run 1 minute - Reject for softness or persistent flashover.			100%	

NOTE

1:- Applied only for sufficient time to obtain steady reading (approx. 2 secs.)

CV1120

VALVE VU120.

RAF Ref. No. 10E/121.

DATA SHEET

Issue	Date
a	18th Feb.43.

TYPE OF VALVE : High vacuum, half-wave rectifier.
CATHODE : Indirectly heated.
BULB : Clear.
COMMERCIAL PROTOTYPE : SU2150A

RATING

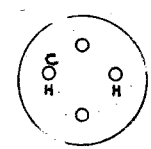
Filament volts	2.0 V.
Filament current	1.5 A approx.
Filament heating time	18 secs.
Max. peak inverse voltage	15,000 V.
Max. peak anode current	100 mA.
Max. RMS applied anode volts	5000 V.
Max. DC output anode current	5 mA.
Suggested smoothing capacitance	0.25 µF.

DIMENSIONS

Max.	overall length	134 mm.
Min.	" "	120 mm.
Max.	" diameter	51 mm.

BASE AND CONNECTIONS ETC.

Type of Base : British 4-pin.
Type of top cap : Thimble type.



Bottom View

ANODE CURRENT AND ANODE VOLTAGE CURVES.

(Source : Cossor Catalogue sheet for SU2150A)