VALVE ELECTRONIC CV312

ADMIRALTY SIGNAL ESTABLISHMENT.

Specification AD/CV312/Issue 2 Dated 19.12.45. To be read in conjunction with K1001, ignoring clause:- 5.2.	SECURITY	
	Specification	Valve
	Restricted	Restricted

TYPE OF VALVE:- High Vacuum Rectifier, half-wave
CATHODE:- Directly Heated, Thoriated Tungsten
ENVELOPE:- Hard Glass
PROTOTYPE:- VX312

MARKING

See K1001/4.

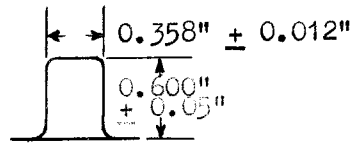
RATING			Note
Vf	(V)	4.0	
If	(A)	11.75	
Min. Total Emission	(A)	2.5	
Max. Continuous Anode Dissipation	(W)	50	A
Max. Peak Inverse Voltage	(kV)	65	

BASE
GES

Connections :-

Base thread	:	F
Base button	:	F
TC	:	A

TOP CAP



NOTES

A. When dissipating 50 W. the anode shows no visible sign of heating.

B. If possible, the holder of the valve should be slightly sprung to avoid the transmission of sharp shocks to the valve. This is on account of the intrinsic brittleness of carbonised tungsten filament.

DIMENSIONS

See K1001/AI/D1

Dimension	Min.	Max.
A mm	-	280
B mm	-	60

MOUNTING

See Note B.

TESTS

To be performed in addition to those applicable in K1001 and in the order given below.

	Test Conditions		Test	Limits		No. Tested
	Vf (V)	Va		Min.	Max.	
a	4.0	0	If (A)	11	12	100%
b	0	-70 kV	High voltage. Suitable circuit for test shown in Fig. 1.	No sparking or field currents exceeding 20 μA, as indicated by the microammeter, to be observed.		100%
c	4.0 Time :- 5 mins.	Adjusted so that anode dissipation = 50 W. (Va about 230 V.)	Vacuum	No visible ionisation glow and no need to re-adjust Va in the last 3 mins.		100%
d	4.0	3 kV applied momentarily. See K1001/AV.	Emission (A)	2.5	-	100%

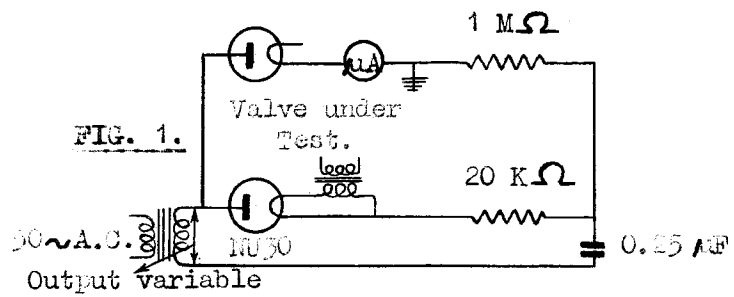


FIG. 1.

DATA.

CV312