ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION MOS/CV273, ISSUE 5A, DATED 1.2.63

Amendment No 1

Insert the following manuscript amendments:-

1 Page 1

i SPECIFICATION AUTHORITY

Delete "Ministry of Supply DLRD/RAE"
Insert "PROCUREMENT EXECUTIVE, MINISTRY OF DEFENCE"

ii SPECIFICATION TITLE

Delete "SPECIFICATION MOS/CV273"
Insert "SPECIFICATION MOD(PE)CV273"

2 Page 2

i TEST CLAUSE(e)

In the column headed "Limits Max" insert "10".

ii TEST CLAUSE (g)

In the column headed "Limits Min" delete "15" and insert "5".
In the column headed "Limits Max" insert "15".

VALVE ELECTRONIC **CV 273**

~~MINISTRY OF SUPPLY D.I.R.D./R.A.E.~~
PROCUREMENT EXECUTIVE, MIN OF DEFENCE.

Specification ~~H08/CV.273~~. MOD(PE) CV273	SECURITY	
	SPECIFICATION	VALVE
ISSUE 5A DATED 1.2.63	Unclassified	Unclassified
To be read in conjunction with K1001, excluding clause: 5.3.		

→ Indicates a change

TYPE OF VALVE:- Disc Seal Triode	MARKING
CATHODE:- Indirectly Heated	See K1001/4.
ENVELOPE:- Glass	
PROTOTYPE:- VX.3018	

RATINGS
(All limiting values are absolute)

			Note
Heater Voltage	(V)	6.3	
Heater Current	(A)	0.4	
Max. Anode Voltage	(V)	350	
Max. Anode Dissipation	(W)	10	A
Max. Mean Anode Current	(mA)	50	B
Max. Peak Anode Current	(mA)	150	B
Amplification Factor		30	C
Mutual Conductance	(mA/V)	6	C
Efficiency at wavelength of 30 cms		28%	
Efficiency at wavelength of 10 cms		5%	

CAPACITANCES (pF)

Cag	1.1
Cout (max.)	0.03
Cin.	2.0

DIMENSIONS AND CONNECTIONS

See Drawings on Pages 3 and 4.

NOTES

A. The anode seal temperature must not exceed 140°C. In order to achieve this and also to limit the rate of change of anode seal temperature it is necessary that the mass of metal in close thermal contact with the anode disc shall not be less than 2 oz. (approx. 60 grams) of brass, or its equivalent.

B. Under C.W. conditions.

C. With Va = 250 V., Ia = 20 mA.

To be performed in addition to those applicable in K1001.

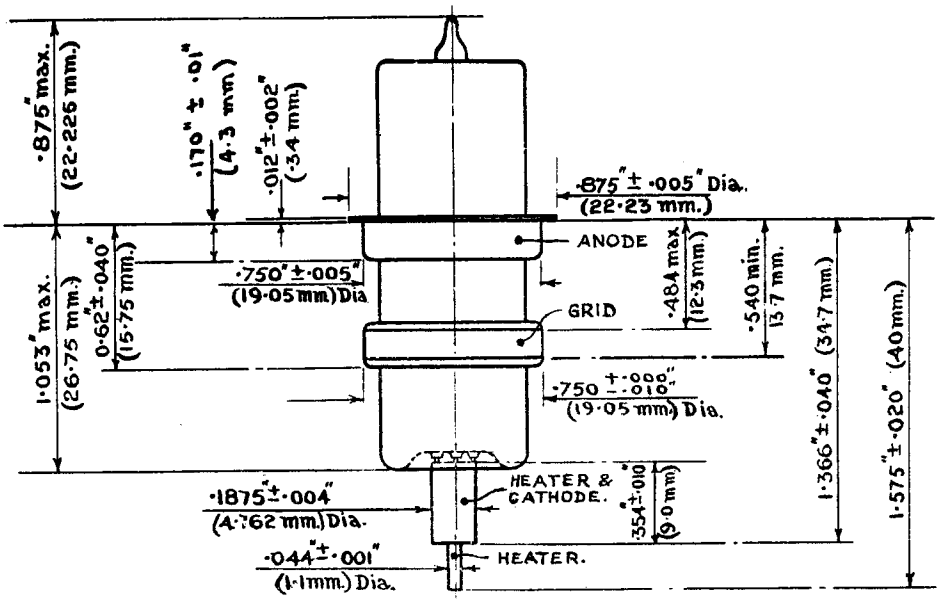
	Test Conditions				Test	Limits		No. Tested	Note
						Min.	Max.		
a	Measurements shall be made at a frequency of 1.0 Mc/s using a jig which shall conform to R.A.E. Drawing No.W.T.40482 or any other approved method.				Capacitance (pF) Cag Cout Cin	 0.7 - 1.5	 1.4 0.03 2.4	6 per week.	1
	Vh	Va	Vg	Ia(mA)					
b	6.3	0	0	0	Ih (A)	0.37	0.43	100% or S	
c	6.3	350	Adjust	30	Reverse Ig (μA)	-	1.0	100%	2
d	6.3	350	Adjust	2	Reverse Ig (μA)	-	1.0	100%	
e	6.3	250	Adjust	20	-Vg (to be noted) (V)	1	~~-~~ 10	100%	
f	6.3	250	as in test(e)	-	gm (mA/V)	3.0	-	100%	
	peak grid swing ±0.5 V max.								
g	6.3	250	Adjust	2	-Vg (V)	~~15~~ 5	15	100%	
h	6.3	100	+2	-	Ig (mA)	1.0	12	100%	

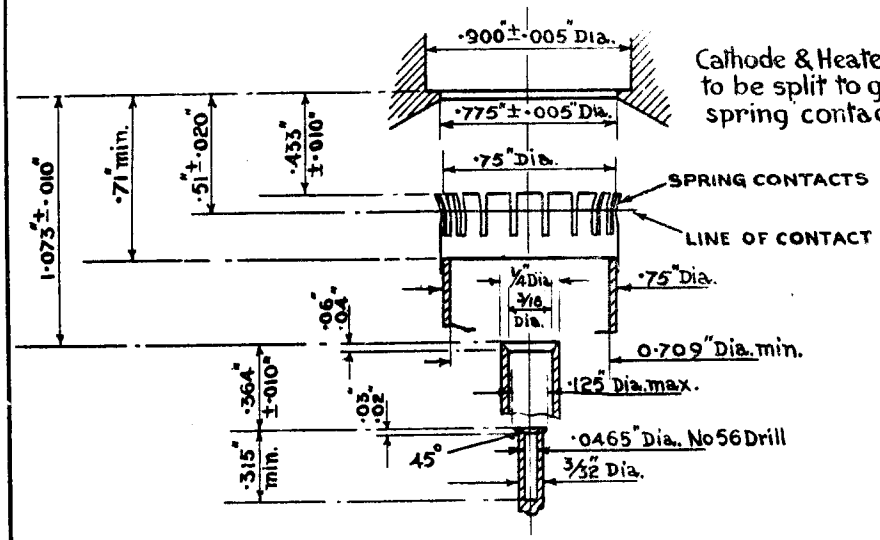
NOTES

1. Measured Cin may be up to 3.2 pF provided the measured conductance lies between 0.6 and 2.0 micro-mhos.

2. Valve must be run for one minute before reading is taken.

CV 273

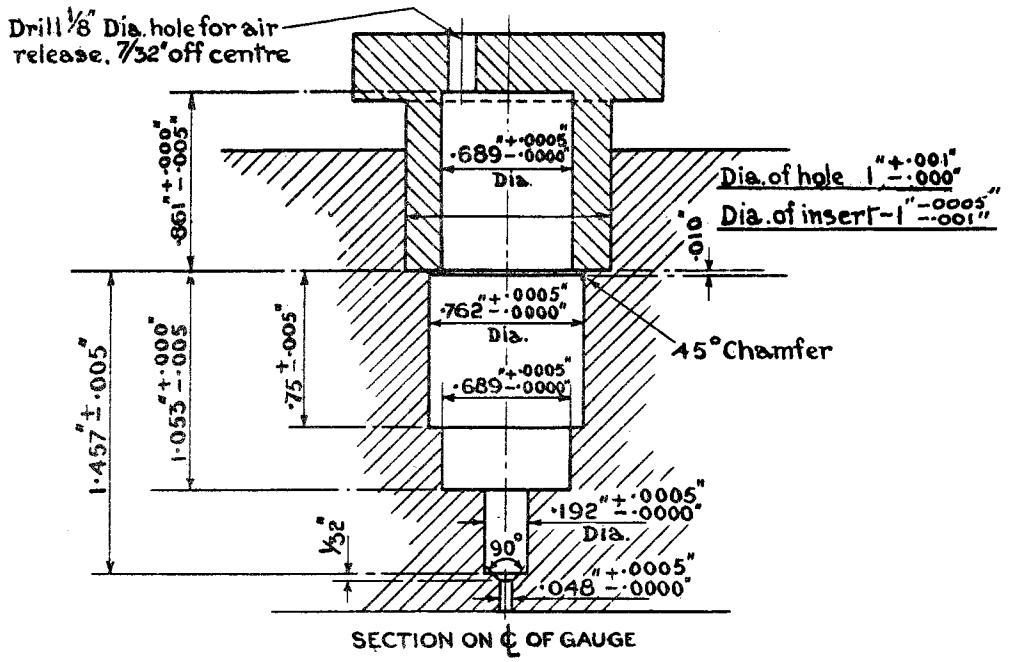




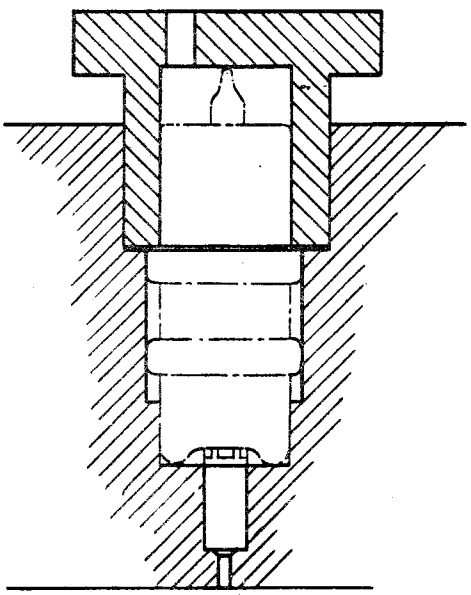
Cathode & Heater sockets to be split to give spring contact.

RECOMMENDED CIRCUIT DIMENSIONS

CV273



SECTION ON ℄ OF GAUGE



SECTION ON ℄ OF GAUGE
SHOWING VALVE IN POSITION