

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

Specification MOS/CV.273. ISSUE 5A DATED 1.2.63 To be read in conjunction with K1001, excluding clause: 5.3.	<u>SECURITY</u>	
	<u>SPECIFICATION</u> Unclassified	<u>VALVE</u> Unclassified

—————→ Indicates a change

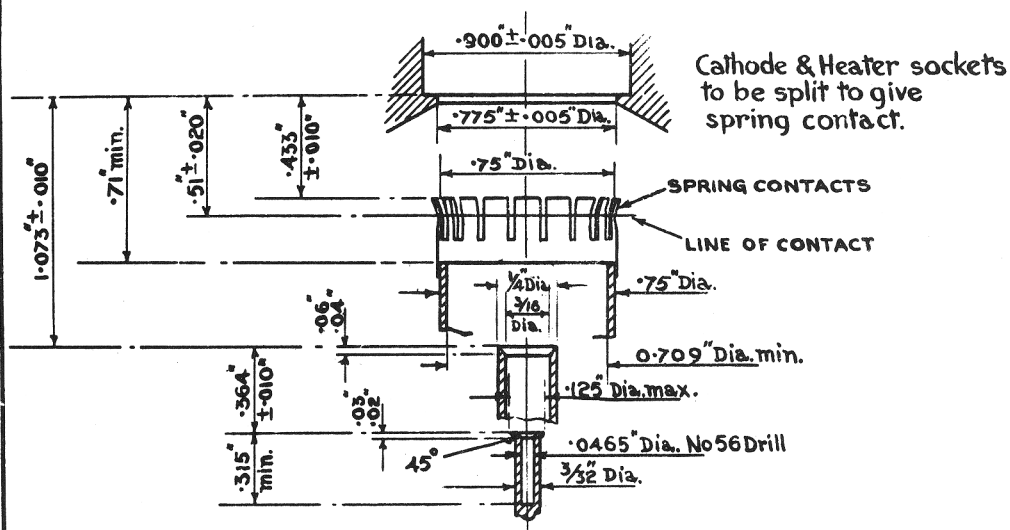
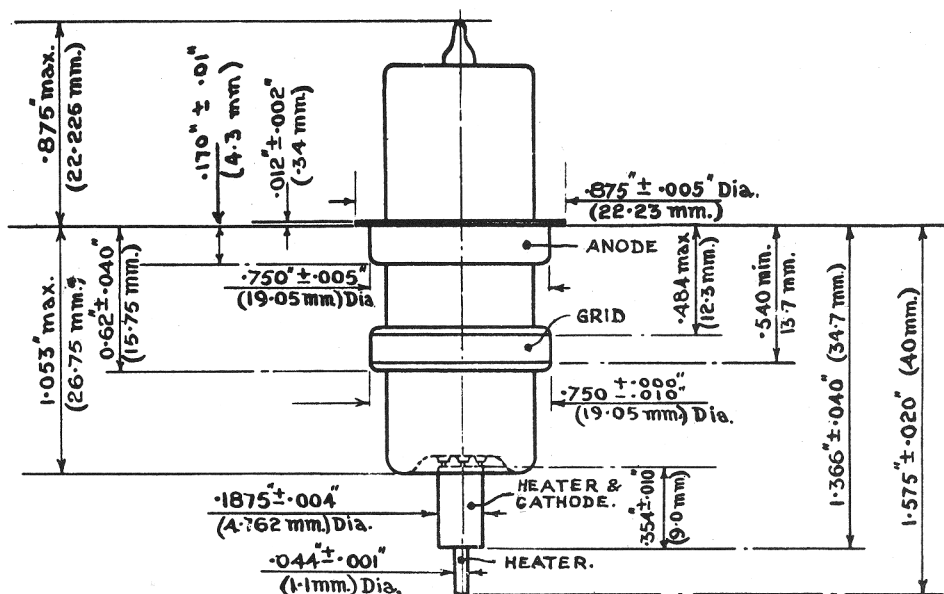
TYPE OF VALVE:- Disc Seal Triode			<u>MARKING</u>	
CATHODE:- Indirectly Heated			See K1001/4.	
ENVELOPE:- Glass				
PROTOTYPE:- VX.3018				
<u>RATINGS</u> (All limiting values are absolute)			<u>DIMENSIONS AND CONNECTIONS</u>	
			See Drawings on Pages 3 and 4.	
			Note	
Heater Voltage	(V)	6.3	A B B C C	
Heater Current	(A)	0.4		
Max. Anode Voltage	(V)	350		
Max. Anode Dissipation	(W)	10		
Max. Mean Anode Current	(mA)	50		
Max. Peak Anode Current	(mA)	150		
Amplification Factor		30		
Mutual Conductance	(mA/V)	6		
Efficiency at wavelength of 30 cms		28%		
Efficiency at wavelength of 10 cms		5%		
<u>CAPACITANCES (pF)</u>				
C _{ag}		1.1		
C _{out} (max.)		0.03		
C _{in} .		2.0		
<u>NOTES</u>				
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 V _a = 250 V., I _a = 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. WT.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
b	Vh	Va	Vg	Ia(mA)	Ih (A)	0.37	0.43	100% or S	
b	6.3	0	0	0					
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	-	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	-	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.



RECOMMENDED CIRCUIT DIMENSIONS

