

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

Specification MOSA/CV2214 Issue 3 Dated 1.2.55 To be read in conjunction with BS448, BS1409, and K1001.	<u>SECURITY</u>	
	<u>Specification</u>	<u>Valve</u>
	UNCLASSIFIED	UNCLASSIFIED

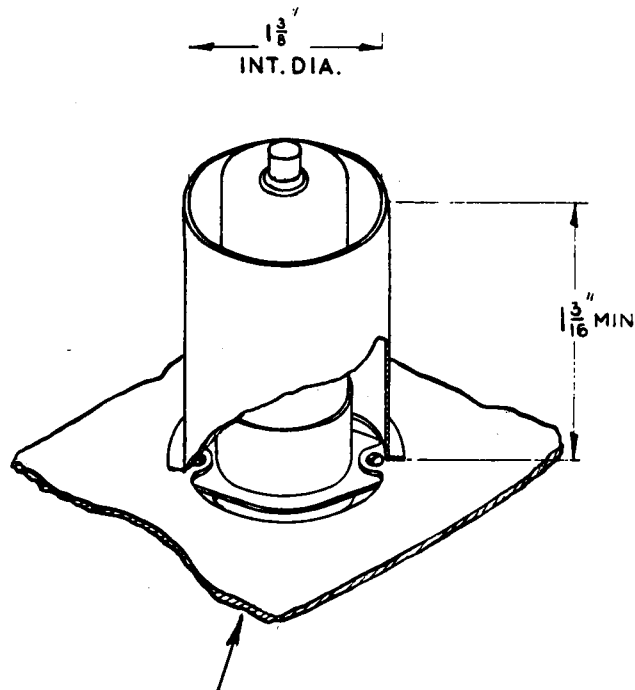
→ Indicates a change

TYPE OF VALVE - Grounded Grid Triode CATHODE - Indirectly heated ENVELOPE - Glass, unmetallised PROTOTYPE - 3B/240M		<u>MARKING</u> see K1001/4	
		<u>BASE</u> BS448/B8G	
		<u>TOP CAP</u> BS448/C14 ←	
<u>RATING</u>		<u>CONNECTIONS</u>	
		Note	
		Pin	Electrode
Heater Voltage (V)	6.3	1	h
Heater Current (A)	1.1	2	k
Max. Anode Voltage (V)	400	3	g
Max. Anode Dissipation (W)	24	4	g
Mutual Conductance (mA/V)	27	5	g
Amplification Factor	90	6	g
Max. Frequency of operation (Mc/s)	200	7	k
		8	h
		TC	a
<u>CAPACITANCES (pF)</u>		<u>DIMENSIONS</u> see K1001/A1/D7	
		Dimensions	Min Max.
Gg, kh (nom)	11.0	A (mm)	- 80.2
Ca, kh (nom)	0.15	S (mm)	- 30.15
Ca, g (nom)	4.3	L (mm)	- 66.7
<u>NOTES</u>			
A. Absolute maximum value. B. Forced air cooling is required for anode dissipation in excess of 15 watts. 5 cu. ft per minute is usually adequate if introduced at the bottom of a 1-3/8" diameter valve screen, as indicated on the drawing on Page 3. C. Measured at Va = 300 V; Vg = -1; Ia = 50 mA.			

To be performed in addition to those applicable in K.1004

TEST CONDITIONS					TEST	Limits		No. Tested	Note				
						Min.	Max.						
To be measured in an approved adapter.					<u>CAPACITANCES (pF)</u>			6	per week				
	Links to H.P.	Links to L.P.	Links to E										
a	3,4,5,6	1,2,7,8	9,10,T.C.1, T.C.2.	Cg, kh						-	17.0		
	T.C.1	1,2,7,8	3,4,5,6,9, 10, T.C.2.	Ca, kh						-	0.5		
	T.C.1	3,4,5,6	1,2,7,8, 9,10, T.C.2.	Ca, g	-	5.5 5.7							
	Vh (V)	Va (V)	Vg (V)	Ia (mA)									
b	6.3	0	0	0	Ih (A)	0.9	1.3	100% or S	1				
c	6.3	300	-1	-	Ia (mA)	25	90	100%	1, 2				
d	6.3	300	-1	-	μ	65	115	100%	1				
e	6.3	300	-1	-	gm (mA/V)	17.5	35	100%	1				
f	6.3	400	-	60	Reverse Ig (mA)	-	5	100%	1, 3				
g	6.3	250	250	-	Total emission (A)	5	-	100%	4				
<u>NOTES</u>													
1. Tests b to f inclusive shall be performed with forced air cooling of the bulb as required by Note B on Page 1.													
2. A 100 ohm parasitic oscillation stopper resistor must be inserted in the anode lead.													
3. The duration of this test shall not be less than three minutes. At the end of this period the reverse current to the control grid shall not exceed the value specified and shall not be increasing.													
4. A 2/ μ Sec pulse of 250 volts peak amplitude and 50 c/s repetition frequency shall be applied between the anode plus grid (Strapped) and the cathode.													

CV.2214/3/2



Air flow of 5 cu. ft./min. directed through an air duct from underside of chassis.

NOTE

The maximum bulb temperature occurs on the parts of the bulb opposite pins 1 & 8 and 4 & 5. A valve socket should, therefore be used in which the mounting flanges are opposite pins 2 & 3 and 6 & 7. This will prevent obstruction of the air flow at these points (see sketch below). Alternatively deflecting plates may be fitted to ensure an even air flow around the bulb.

