

SPECIFICATION MOA/CV.5140			<u>SECURITY</u>	
ISSUE NO. 2 DATED 14.3.63			<u>SPECIFICATION</u>	<u>VALVE</u>
To be read in conjunction with K.1001 and BS.1409.			Unclassified	Unclassified
<p>TYPE OF VALVE: U.H.F. Disc-sealed Measuring Diode with flying leads.</p> <p>CATHODE: Indirectly-heated.</p> <p>ENVELOPE: Glass with disc seal.</p> <p>PROTOTYPE: EA52.</p>				
<p><u>RATINGS</u></p> <p>(All limiting values are absolute)</p>			<p><u>BASE</u></p> <p>See Drawing on page 3.</p>	
<p>Heater Volts (V) 6.3</p> <p>Heater Current (A) 0.3</p> <p>Max. Peak Inverse Voltage (f = &lt;100 Mc/s) (kV) 1.0</p> <p>Max. Mean Cathode Current (μA) 300</p> <p>Max. Peak Cathode Current (mA) 5.0</p> <p>Max. Heater-Cathode Voltage (V) 50</p> <p>Max. Heater-Cathode Resistance (kΩ) 20</p> <p>Max. Operating Frequency (Mc/s) 1000</p>			<p><u>CONNECTIONS</u></p> <p>See Drawing on page 3. Note B.</p>	
<p><u>CAPACITANCES</u></p> <p>Cak (max.) (pF) 0.5</p>			<p><u>DIMENSIONS</u></p> <p>See Drawing on page 3.</p>	
<p><u>MOUNTING POSITION</u></p> <p>Any.</p>				
<p><u>NOTES</u></p> <p>A. For frequencies greater than 100 Mc/s the maximum peak inverse voltage is <math>\frac{10^5}{f}</math> Volts. (f is in Mc/s).</p> <p>B. Heater leads must not be soldered closer than 7 m/m or bent nearer than 1.5 m/m from the seal.</p>				

TESTS

To be performed in addition to those applicable  
in K.1001

TEST CONDITIONS: Unless otherwise stated:

These tests are not to be performed until at least 28 days after completion of manufacture.

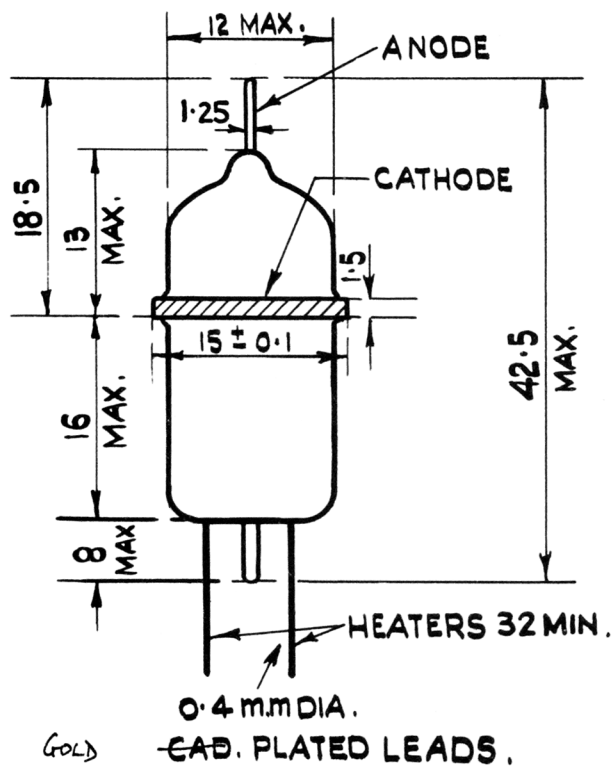
$V_h = 6.3V$ . The tests to be performed after an initial warming up period of at least three minutes.

Test	Test Conditions	AQL %	Insp. Level	Symbol	LIMITS		Units
					Min.	Max.	
<u>GROUP A</u>							
Electrode Insulation	Va = -30CV. Note 1.	-	100%	R	10	-	MΩ
Heater-Cathode Leakage Current	Vhk = ± 5CV. Note 2.	-	100%	Ihk	-	13	μA
Heater Current		-	100%	Ih	288	312	mA
Anode Current (1)	Va = +3V.	-	100%	Ia	600	-	μA
Anode Current (2)	Vh = 5.7V. Va = C.	-	100%	Ia	1.0	-	μA
Anode Current (3)	Va = C.	-	100%	Ia	3.0	-	μA
<u>GROUP B</u>							
Capacitance	To be performed on a 1Mc/s bridge in an approved holder. Note 3.	2.5	10	Cak	-	0.5	pF

NOTES

1. Heater and cathode strapped and considered as a single electrode.
2. Heater positive and negative successively.
3. The capacitance connections shall be:-

H.P. - anode. L.P. - cathode. E - heaters and metal parts.



ALL DIMENSIONS IN m.m.