

Specification MAP/CV1048/Issue 6 Dated 24.1.49 To be read in conjunction with K1001.	<u>SECURITY</u>	
	<u>Specification</u> RESTRICTED	<u>Valve</u> UNCLASSIFIED

→ Indicates a change

<u>TYPE OF VALVE</u> - Screen Grid Tetrode		<u>MARKING</u>	
<u>CATHODE</u> - Directly heated		See K1001/4. Plus additional marking (see Page 2)	
<u>ENVELOPE</u> - Glass-Metallised		<u>PACKING</u>	
<u>PROTOTYPE</u> - 215 SG.		See K.1005 and Page 2 (Note 3)	
<u>RATING</u>		<u>BASE</u>	
Filament Voltage (V)	2.0	B4	
Filament Current (A)	0.15	Pin	Electrode
Max. Anode Voltage (V)	180	1	Screen grid
Max. Screen Voltage (V)	80	2	Control grid
Mutual Conductance (mA/V)	1.1	3	Filament negative and metallising
Anode Impedance (M Ω)	0.3	4.	Filament positive
Amplification Factor	330	T.C.	Anode
<u>CAPACITANCES (pF)</u>		<u>TOP CAP</u>	
Cag (max.)	0.005	See K.1001/AI/D5.4	
		<u>DIMENSIONS</u>	
		See K1001/AI/D1	
		Dimension	Min. Max.
		A (mm)	- 131
		B (mm)	- 45
		Diameter of valve not to exceed 37 mm. up to height of 58 mm. from bottom of pins.	

ADDITIONAL MARKING

1. The following shall appear on the bulb:-

"FOR
W 

SERIAL NO. "


- The letter "W" shall be a $\frac{1}{4}$ " character and the other letters in $\frac{1}{8}$ " characters.
2. The valves shall be numbered, on the base or bulb, in sets of three, matched as in test 'b', each valve of a set bearing the same number which shall appear immediately in front of the factory identification code letter. Numbers shall be used progressively and shall be repeated after the 999th set.

3. Packing

For packing of matched sets - see K.1001/7.5
The package shall be labelled thus:-

One set of
Three Selected Matched
Valves Type CV1048
Ref. No.10CV/1048
for use in Wavemeters.

TESTS

CV1048

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

Test Conditions					Test	Limits		No. Tested
						Min.	Max.	
a	Measured using Adaptor type 35 Ref. 10A/13331				<u>CAPACITANCES</u> (pF)			
	See K1001/AIII							
	Links to H.F.	Links to L.F.	Links to E					
	TC1	2	1,3,4 5,6,7 8,9,10 TC2					
	TC1	1,2,3,4	5,6,7 8,9, 10 TC2					
b	Vf	Va	Vg1	Vg2	If (A)			100% or S
	2.0	0	0	0				
c	2.0	180	0 to -1	60	gm (mA/V)	0.9	1.35	100%
d	2.0	180 to 120	0	60	Ia change (mA)	0.06	0.24	100% or S
e	2.0	180	0	60	Ia (mA)	1.75	3.25	100%
f	1.8	180	-1	60	Ig1 (μ A)	-	1.0	100%
g	See K1001/5.8.2.				<u>MICROPHONIC NOISE TEST</u>			100%
h	<u>MATCHING</u> The valve shall be matched in sets of three having the same capacitance to within 0.1pF. of each other.							