

Specification MAP/CV92/Issue 4. Dated 18.1.50. To be read in conjunction with K1001 ignoring clause:- 5.2.	<table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td>Specification</td><td>Valve</td></tr> <tr> <td><del>RESTRICTED</del></td><td>UNCLASSIFIED</td></tr> </table>	SECURITY		Specification	Valve	<del>RESTRICTED</del>	UNCLASSIFIED
SECURITY							
Specification	Valve						
<del>RESTRICTED</del>	UNCLASSIFIED						

→ Indicates a change

<p><u>TYPE OF VALVE</u> - Triode with forced air-cooled anode.</p> <p><u>CATHODE</u> - Indirectly heated, oxide coated.</p> <p><u>ENVELOPE</u> - Metal glass construction.</p>	<p><u>MARKING</u> See K1001/4.</p> <p><u>PACKING</u> See K1005</p> <p><u>BASE</u> None</p>
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<u>RATING</u>	Note	<u>DIMENSIONS and CONNECTIONS</u>
Heater Voltage (V) 6.0 Heater Current (A) 6.5 Max. Peak Anode Voltage (kV) 8.0 Max. Anode Dissipation (W) 150 Amplification Factor 22 Average Grid Voltage (V) -31 Efficiency of pair of Valves at Wavelengths of Operation of 50 cms. 40% Absolute Min. Wavelength of Operation (cms) 40	A B C	See drawing on page 3
<u>CAPACITANCES (pf)</u> Cag 8.0 Cge 11.0 Cae 2.25		

NOTES

- A - The valve shall be processed so that it will withstand H.T. switching in two stages, viz:- first to half  $V_a$  then to full  $V_a$ , when operated in a push-pull oscillator circuit modulated by a pulse of length  $1.0 \mu\text{sec.}$ , with repetition frequency 500 per sec. and with  $V_a$  not greater than 8.0 (kV).
- B - During testing and operation the air-cooled surface of the anode must be maintained below  $140^\circ\text{C}$ . A blast of air blown on to the anode diffuser at the rate of at least 5 cu. ft./min. and on to the grid seal at the rate of approx. 1 cu.ft./min. is suggested.
- C:- At  $V_a = 1\text{kV}$ ,  $I_a = 100 \text{ mA}$ .

TESTS

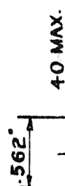
To be performed in addition to those applicable in K1001.

	Test Conditions			Test	Limits		No. Tes- Noted
	Vf	Va	Ia(mA)		Min.	Max.	
a	6.0	0	0	Ih(A) (A)	5.85	7.15	100%
b	6.0	1000	100	Vg (V)	-19.0	-43.0	100%
c	6.0	1000	100	Reverse Ig (gas) (μA)	-	10	100% 1
d	6.0	1000	100	Reverse Ig (Emission Current) (mA)	-	10	100% 1
e	6.0	500	100	1. Vg 2. Change in Vg from value noted in (b).	Must not be positive  17 29		  100% 100%
f	6.0	Anode and grid strapped Peak applied voltage 1.5 kV. tp = 2μsecs. PRF = 50/sec. Pulse shape sinusoidal	Peak emission (A)	40	-	100%	
g	Measured using adaptor Type 111 Ref. 10A/19297 See K1001/A.III			<u>CAPACITANCES</u> (pF)			T.A.
	Links to H.P.	Links to L.P.	Links to E				
	2	3	1,4,5,6 7,8,9,10 TC1, TC2				
	3	1	2,4,5,6 7,8,9,10 TC1, TC2				
	2	1	3,4,5,6 7,8,9,10 TC1, TC2				
			Cag	6.0	10.0		
			Cge	8.25	13.75		
			Cae	1.5	3.0		

Note

- The gas component of the negative Ig can be taken as the immediate decrease in negative current when Vg is rapidly increased to cut-off value. The presence of unsaturated grid emission may render test "c" impossible.

NO GO' RING GAUGE  
1.49" DIA.



TO TAKE  
GAUGE SHOWN  
OPPOSITE.

0 B.A. THREAD  
LENGTH 10 MAX.  
FROM BASE.

¢ OF  
ADIATOR

60 APPROX.

32 DIA.

6

HEATER  
LEAD.

CATHODE LEAD  
COLOURED WHITE

NOTE:- ALL DIMENSIONS ARE IN MILLIMETRES  
UNLESS OTHERWISE STATED.

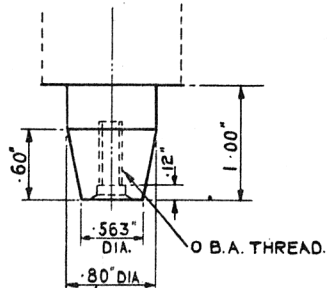
Technical drawing of a knurled nut, showing a side view and a top view. The side view includes the following dimensions and labels:

- Overall height: 3"
- Height of the base: 2.25"
- Height of the knurled section: 1.00"
- Knurled section height detail: .25"
- Knurled section height detail: .562"
- Top diameter: .82" DIA.
- Second diameter from top: .58" DIA.
- Third diameter from top: .281" DIA.
- Label: CHAMFERED (pointing to the transition between the top diameters)
- Label: TAPPED O.B.A. (pointing to the internal thread)
- Internal thread specification: 1/2-20 UNF-2A
- Bottom diameter: .625" DIA.
- Overall width: 1.375" DIA.
- Label: KNURLED SURFACE. (pointing to the knurled section)
- Label: .4375" DIA. HOLE. (pointing to the central hole in the base)

The top view shows a circular cross-section with concentric circles representing the diameters.

MAT:- BRASS OR MILD STEEL  
TAKEN FROM DRG. OF A.S.E. GAUGE № 32302

MAXIMUM OUTSIDE  
DIMENSIONS OF SUITABLE  
GRID CONNECTORS.



WHEREVER POSSIBLE KEEP  
THIS DIMENSION DOWN TO .75" DIA.