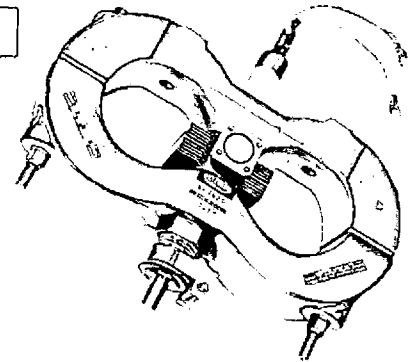


The technical information on this data sheet is of a proprietary nature and is furnished as a customer service for private use only.

RK7630/QK702**PRELIMINARY****DATA SHEET***Excellence in Electronics*

GENERAL DESCRIPTION

The RK7630/QK702 is a tunable, medium power, pulsed type oscillator capable of delivering 70 kilowatts of peak power. The RK7630/QK702 is tunable within the frequency region of 15,840 - 16,160 megacycles. The magnetron is an integral magnet, waveguide output type tube requiring forced air cooling and is designed for coupling to standard RG 91 U waveguide (0.702 x 0.391).

Mechanical Data

Mounting Position	Cathode Vertical
Net Weight	26 Lbs.
Cooling	Forced Air
Output Pressurization	Required (25 psia Min.)

Electrical Data

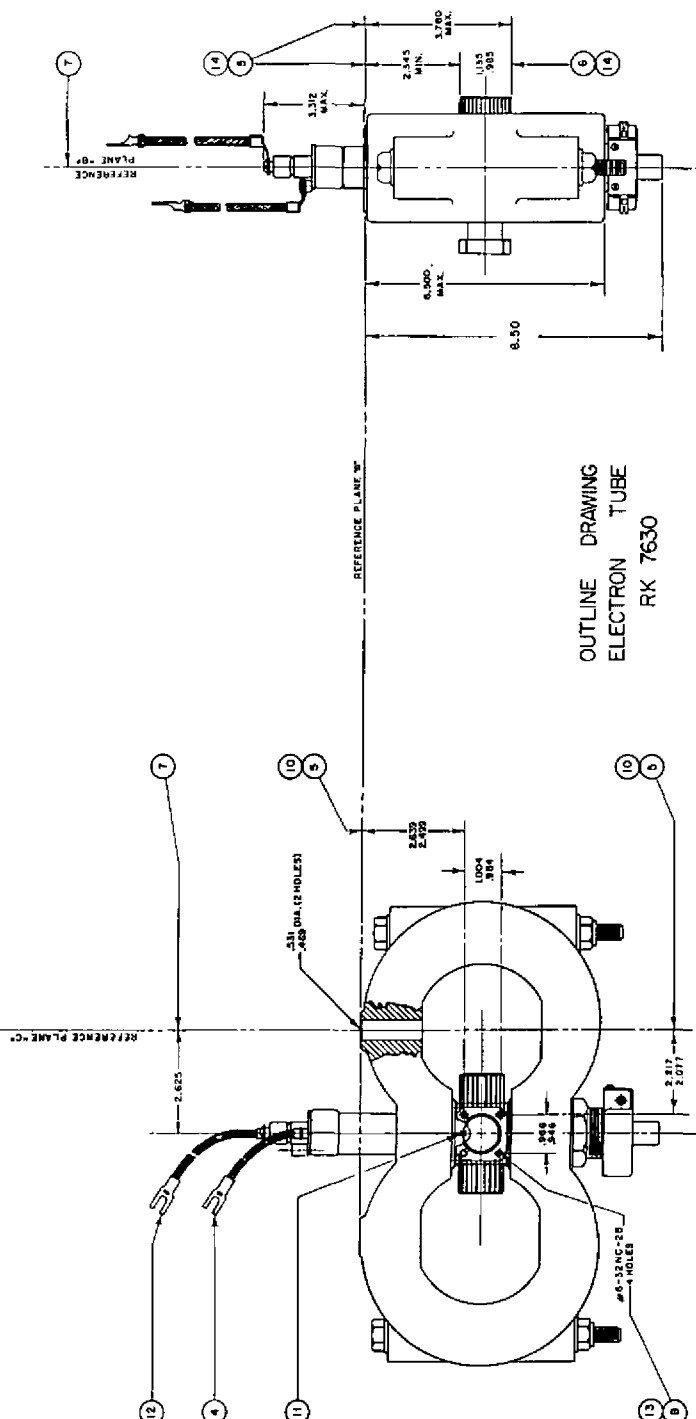
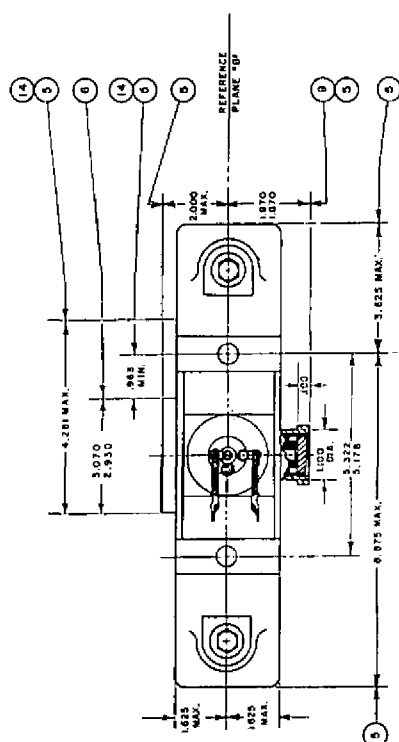
Heater Voltage - Preheat/180 sec	4.8 Volts
Heater Current at 4.8 Volts	10.8 - 13.2 Amperes
Voltage Rise Time	.09 to .14 usec
R. F. Bandwidth	2.0/tpc Max.
Maximum V.S.W.R.	1.5

Typical Operation

Pulse Duration	0.25 usec
Duty Cycle	.00215
Average Anode Current	26 Milliamperes
Average Power Output	150 Watts (Min.)
Peak Anode Voltage	24 KV

Reliable operation and maximum magnetron life can be achieved only if the overall radar transmitter is designed with the magnetron characteristics clearly in mind. This preliminary Data Sheet is intended as an introduction to this type magnetron and not as an absolute guide to users. Inquiries on this magnetron and its application should be directed to the Applications Engineering Department at Raytheon Company, Waltham, Massachusetts.

The specifications for this tube have not been finalized. The tube is being manufactured in limited quantities and is available for engineering analysis purposes only. This engineering information and/or delivery of sample tubes do not imply availability of tubes with the same electrical and/or mechanical characteristics. Changes in ratings and/or dimensions may be made at our discretion as deemed advisable by manufacturing experience or other considerations. For current information concerning this tube contact the nearest Microwave and Power Tube Regional Sales Representative.



OUTLINE DRAWING
ELECTRON TUBE
RX 7630

NOTES

1. REFERENCE PLANE "A" IS DEFINED AS A PLANE PASSING ALONG THE FINISHED SURFACE OF THE MAGNET AS SHOWN.
2. REFERENCE PLANE "B" IS DEFINED AS A PLANE PERPENDICULAR TO PLANE "A" PASSING THROUGH THE CENTER OF HOLES AT PLANE "A" AS SHOWN.
3. REFERENCE PLANE "C" IS DEFINED AS A PLANE MUTUALLY PERPENDICULAR TO PLANES "A" & "B" PASSING THROUGH THE CENTER OF THE HOLE AT PLANE "A" AS SHOWN.
4. BROWN PANT TO IDENTIFY COMMON CATHODE CONNECTION.
5. INCLUDES ANGULAR AS WELL AS LATERAL DEVIATION.
6. THESE DIMENSIONS APPLY TO RADIATOR SIZE ONLY.
7. PARTS ON THIS CENTERLINE MAY VARY BY 1/8".
8. PITCH DIAMETER MUST ACCEPT CLASS 2 "GO" GAGE ONLY.
9. FACE OF OUTPUT PLANE TO BE PARALLEL TO REFERENCE PLANE "B" WITHIN .020
10. TAPPED HOLES MUST BE PARALLEL TO REFERENCE PLANE WITHIN .010
11. ANODE TEMPERATURE CHECK POINT.
12. HEATER CONNECTION.
13. MINOR DIAMETER MUST NOT BE GREATER THAN .114
14. APPLIES ONLY TO THAT PORTION OF RADIATOR WHICH EXTENDS BEYOND MAGNETS.