

Security Classification: Confidential

Type 4J36-41  
MAGNETRON

General Characteristics

Electrical

|                                           |                                      |             |             |
|-------------------------------------------|--------------------------------------|-------------|-------------|
| Filament or Cathode<br>Voltage<br>Current | Cathode type<br>16 volts<br>3.1 amps |             |             |
| Frequency                                 | <u>Type</u>                          | <u>Min.</u> | <u>Max.</u> |
|                                           | 4J36                                 | 3650        | 3700 Mc     |
|                                           | 4J37                                 | 3600        | 3650 Mc     |
|                                           | 4J38                                 | 3550        | 3600 Mc     |
|                                           | 4J39                                 | 3500        | 3550 Mc     |
|                                           | 4J40                                 | 3450        | 3500 Mc     |
|                                           | 4J41                                 | 3400        | 3450 Mc     |
| Field Strength                            | 2500 gauss                           |             |             |
| Power Output                              | 1000 watts                           |             |             |

Mechanical

See Outline Drawing

Maximum Ratings (Peak values for duty cycle  
specified)

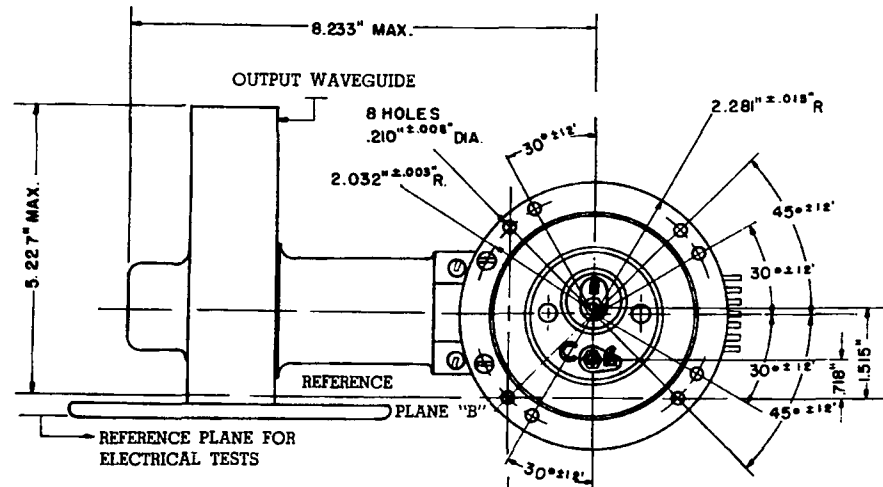
|                   |                  |
|-------------------|------------------|
| Duty Cycle        | .001             |
| Anode Voltage     | 30,000 volts     |
| Anode Current     | 70 amps          |
| Anode Dissipation | 1200 watts       |
| Pulse Width       | 2.5 microseconds |

from RMA release # 456, Nov. 23, 1945

Sponsor: Raytheon Manufacturing Company, Power Tube Division

# TECHNICAL INFORMATION MAGNETRON OSCILLATOR

## OUTLINE DRAWING



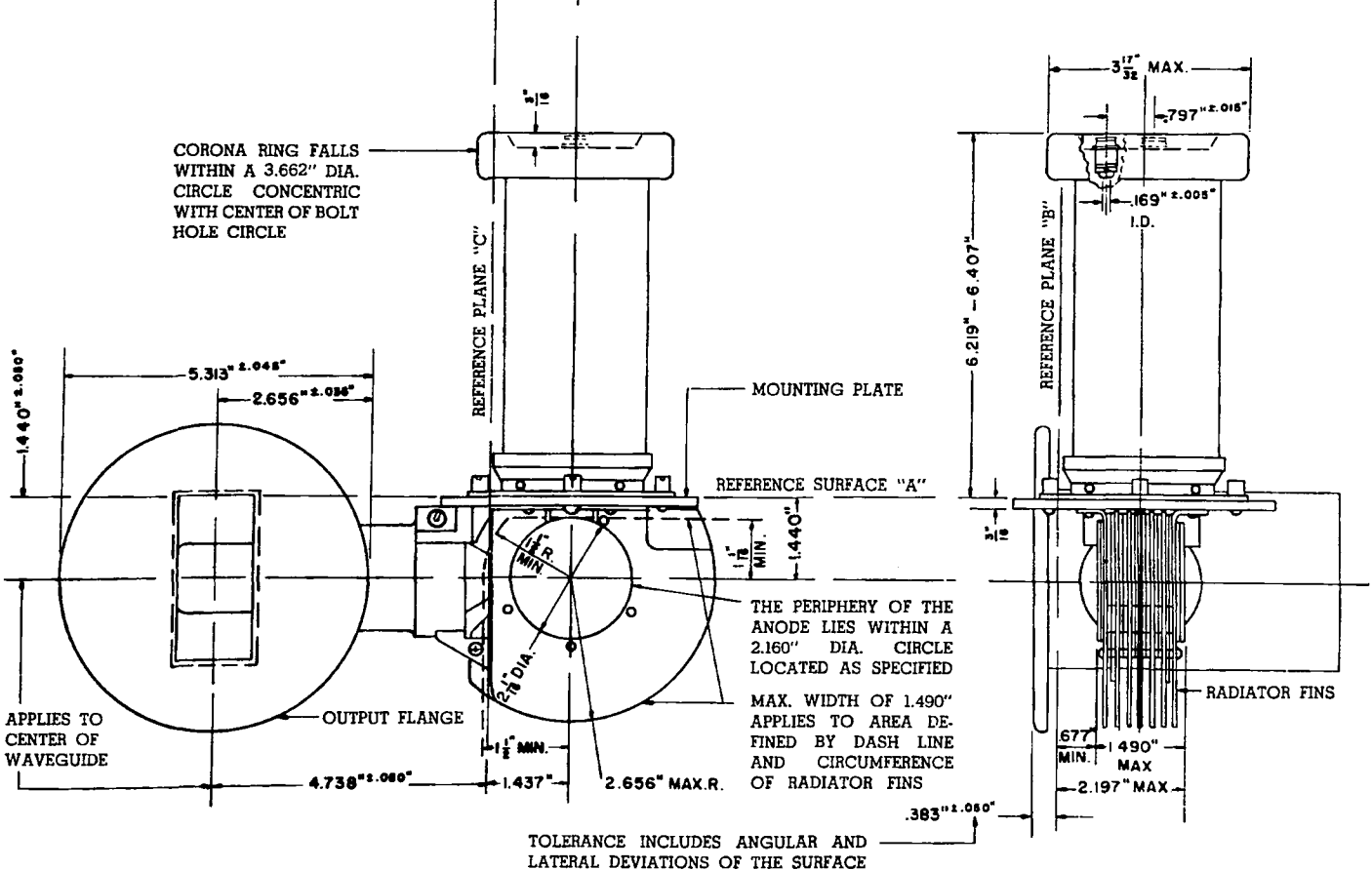
SOLDERED JOINTS IN THE MOUNTING PLATE ARE VACUUM TIGHT TO PROVIDE A HERMETIC SEAL. ALL POINTS ON REFERENCE SURFACE ARE FLAT TO WITHIN .010" FOR 1/2" IN FROM OUTER EDGE.

OUTPUT WAVEGUIDE — COMMERCIAL RECTANGULAR BRASS TUBING 1 1/2" x 3" x .080" WALL.

TWO 5/16" LOCKING TYPE PIN JACKS, 1 9/32" IN LENGTH. THEIR HOLES ARE .169 ± .005" DIA. AND WILL FIT STANDARD G.R. NO. 274 BANANA PINS.

PIN JACKS ARE WITHIN A RADIUS OF .100" OF THE LOCATION SPECIFIED.

COMMON HEATER-CATHODE CONNECTION INDICATED BY LETTER "C."



TOLERANCE INCLUDES ANGULAR AND LATERAL DEVIATIONS OF THE SURFACE

RAYTHEON MANUFACTURING COMPANY WALTHAM, MASSACHUSETTS  
POWER TUBE DIVISION