

# Super-Power Beam Power Tube

2 MEGAWATTS PEAK POWER OUTPUT IN  
SHORT-PULSE SERVICE AT 425 MHz

PULSE LENGTH  
TO 15 MICROSECONDS

LOW FILAMENT POWER  
FOR AIRBORNE USE

## LIQUID COOLED

*For Grid-Driven, Plate-Pulsed Amplifier Applications  
at Frequencies from 174 to 600 MHz in Long-Range  
Search Radar and in Pulsed Communications Applications*

*The 8587 is the same as the 6952 except for the following items:*

## MECHANICAL

Overall Length. . . . . 9.19 ± 0.31 in

## COOLING CONSIDERATIONS<sup>a</sup>

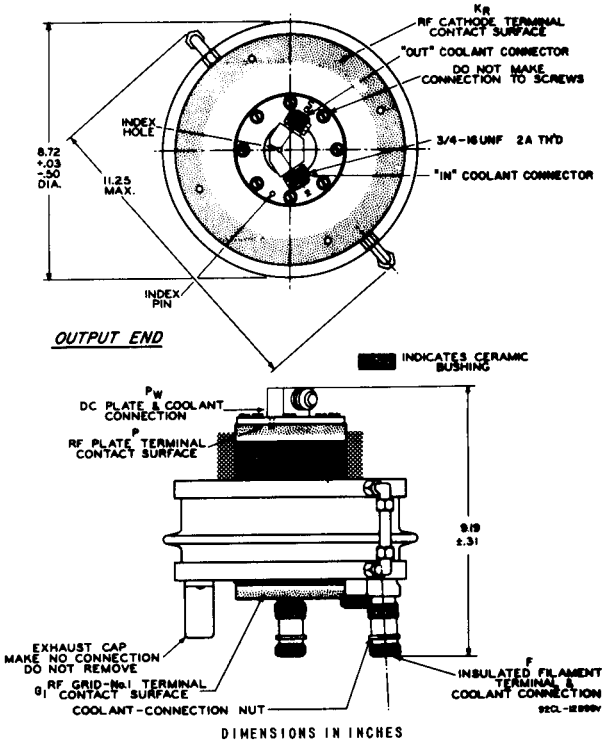
To inspect the plate coolant course: (1) Remove the 8 screws from the plate terminal. Lift the plate-terminal assembly carefully out of the tube. This assembly should come out easily. (2) Remove the O-ring from the moat. (3) Inspect the internal structure of the plate coolant course with the aid of a convenient light source.

- (a) When water or ethylene-glycol-water solution is used, the plate-terminal assembly may stick in (1) above due to excessive deposit build-up. If so, clean the plate coolant course before further attempting to remove the assembly. In (3) above determine if there is a flaky or adherent deposit on the structure. If a deposit is observed, it should be removed. Such a deposit generally consists of copper oxide (usually black) which can be removed by cleaning as above.
- (b) When liquid coolant FC75 is used, determine if there are any particles. Remove any particles. In general, the metal surface of the coolant course should not exhibit any heavy deposits or oxide coatings.
- (4) Replace the O-ring in the moat. Orient the plate-terminal assembly so that it is in its original position (refer to the index pin of the tube for orientation) and then seat it. Replace the 8 screws. Tighten the screws in succession until snug.

<sup>a</sup> See *Cooling Considerations-Liquid Cooling*, under *RCA Transmitting Tube Operating Considerations* given at front of this section.



## SIMPLIFIED DIMENSIONAL OUTLINE\*



A detailed Dimensional Outline and associated Gauge Drawings are given in the Technical Bulletin available upon request.

FOR ADDITIONAL INFORMATION ON THIS TYPE INCLUDING INPUT AND OUTPUT CAVITY DRAWINGS, WRITE FOR TECHNICAL BULLETIN AND APPLICATION GUIDE FOR RCA SUPER POWER TUBES, 1CE-279A, AVAILABLE FROM:

Commercial Engineering  
Electronic Components and Devices  
Radio Corporation of America  
Harrison, New Jersey