

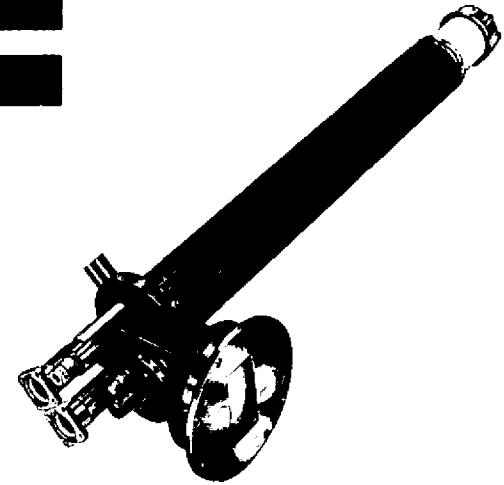
The technical information on this data sheet is of a proprietary nature and is furnished as a customer service for private use only.

8128

OBJECTIVE

DATA SHEET

RAYTHEON



The 8128 is a wide band, 60 kw, (minimum) traveling wave tube designed for pulsed operation over the 2900 to 3100 megacycle range. This tube has a minimum gain of 20 db, and it utilizes a solenoid for the focusing magnetic field. This is a high duty cycle version of the QKW750 which was originally developed under BuShips Contract No. NObsr-72820

The 8128 is designed for use as a driver for the 8129 Amplitron, and it is ideal for frequency diversity type radar applications.

GENERAL CHARACTERISTICS

Typical Electrical Data

Heater Voltage	8 Volts
Heater Current	8.0 Amperes
Cathode Heating Time	5 Minutes
Frequency Range	2900 - 3100 Mc
Peak Power	60 kilowatts (min.)
Average Power Output	1260 Watts (min.)
Magnetic Field	700 Gauss
Pulse Width	30 usec
Duty Cycle021
Pulse Voltage	34.5 kilovolts
Peak Current	12 amperes
Perveance	1.9 uperv.
Load VSWR	1.5 Max.

Mechanical Data

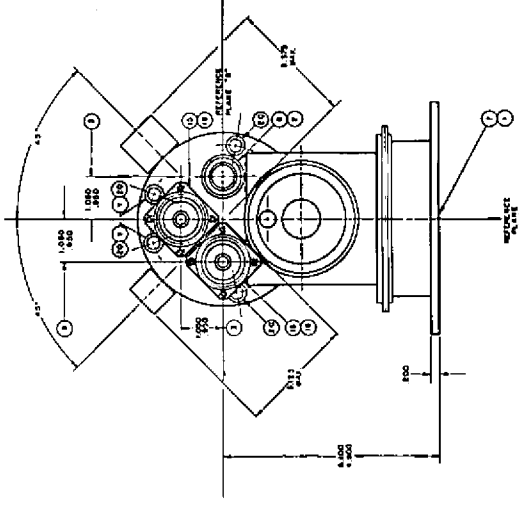
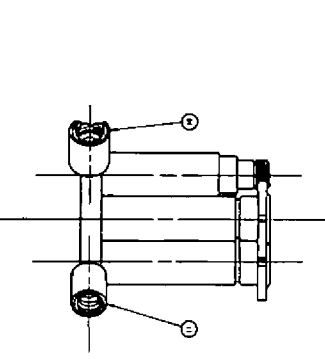
Overall Dimensions	See Outline Drawing
Net Weight	20 Pounds (approx.)
Cooling	Liquid
Output Coupling	UG 54 A/U
Mounting Position	Any
Solenoid	Raytheon SWS 100
Termination	Raytheon Le SH 1

12/61

RAYTHEON COMPANY | Microwave and Power Tube Division | WALTHAM 54, MASS.

The specifications for this tube have not been finalized. The tube is in the development stage 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.

**ELECTRON TUBE
OUTLINE DRAWING
8128**



NOTES

1. REFERENCE FLANGE "A" IS A PLATE MOUNTED THROUGH THE AXIS OF "A" DIA. AND MOUNTS BETWEEN THE PAIRS OF PLATE "T" AND "T" THROUGH THE AXIS OF "T" DIA. A PLATE PERPENDICULAR TO PLATE "A" MOUNTS THROUGH THE AXIS OF "T" DIA.
2. PART TO MATE WITH A TYPICAL COOPERATIVE FLANGE.
3. THESE DIMENSIONS APPLY FROM THE AXIS OF DIA. "A".
4. THESE DIMENSIONS APPLY FROM "T" DIA.
5. SEE NOTE 1.
6. SEE NOTE 2.
7. SEE NOTE 3.
8. LACK OF WORK ON THIS TUBE MAY BE CORRECTED BY SUBSTITUTION OF A 1/16" DIAMETER GAGE IN PLACE OF WHICH CONTACTS A "T" SWITCH. THE LOCATION OF THESE NOTCHES IS FOR INFORMATION PURPOSES AND HAS NO EFFECT ON THE OPERATION OF THE TUBE.
9. PITCH DIA. MUST ACCEPT A CLASS J "COO" GAGE ONLY.
10. MONOR DIA. MUST NOT BE GREATER THAN .148.
11. PART TO BE IDENTICAL TO AND IDENTICAL GETTER BOMBING.
12. CATHODE TEMPERATURE MEASUREMENT POINT.
13. PART TO BE IDENTICAL TO AND IDENTICAL FOR TERMINATION.
14. PART TO MATE WITH 100/10 COOPERATIVE FLANGE.
15. CENTERLINE "C" IS DEFINED AS A CENTERLINE WHICH PASSES NORMAL BETWEEN DIMENSION "C".
16. CENTERLINE "C" MUST BE ON PLANE "A" WITHIN .010.
17. THESE DIMENSIONS MUST ACCEPT THE TOLERANCE OF A 1/16" DIAMETER GAGE WITHIN .001.
18. THESE DIMENSIONS MUST ACCEPT THE TOLERANCE OF A 1/16" DIA. GAGE WITHIN .001 AND FINISHED AS SHOWN WITH SURFACE TO PLANE "B".

