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 Cycle ...................................................... .021
- 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

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.