



**EIMAC**  
 A Division of Varian Associates  
 SAN CARLOS, CALIFORNIA

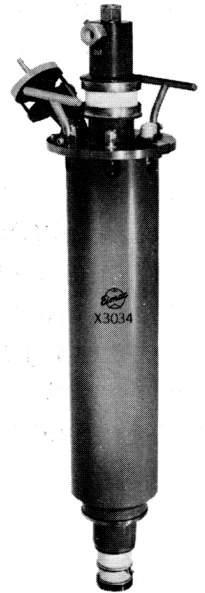
Tentative Data

**X3034**

**POWER AMPLIFIER  
 S-BAND  
 (1.1 KW CW)  
 TWT**

The Eimac X3034 is a power-amplifier TWT intended for use in broadband communications systems. It is designed to operate at frequencies from 1.7 to 2.1 gigacycles with a minimum output power of 1.1 kilowatts. The electron gun of this TWT has a confined flow configuration which makes focusing adjustments unnecessary and produces a stable beam. Excellent isolation between input and output is assured through the use of terminated severed circuits. This TWT incorporates the Eimac Modulating Anode which provides a versatile means for controlling the beam.

Eimac electromagnet assembly Type Number H-199 has been designed for use with the X3034.



**CHARACTERISTICS**

**ELECTRICAL**

Cathode: Impregnated, Unipotential

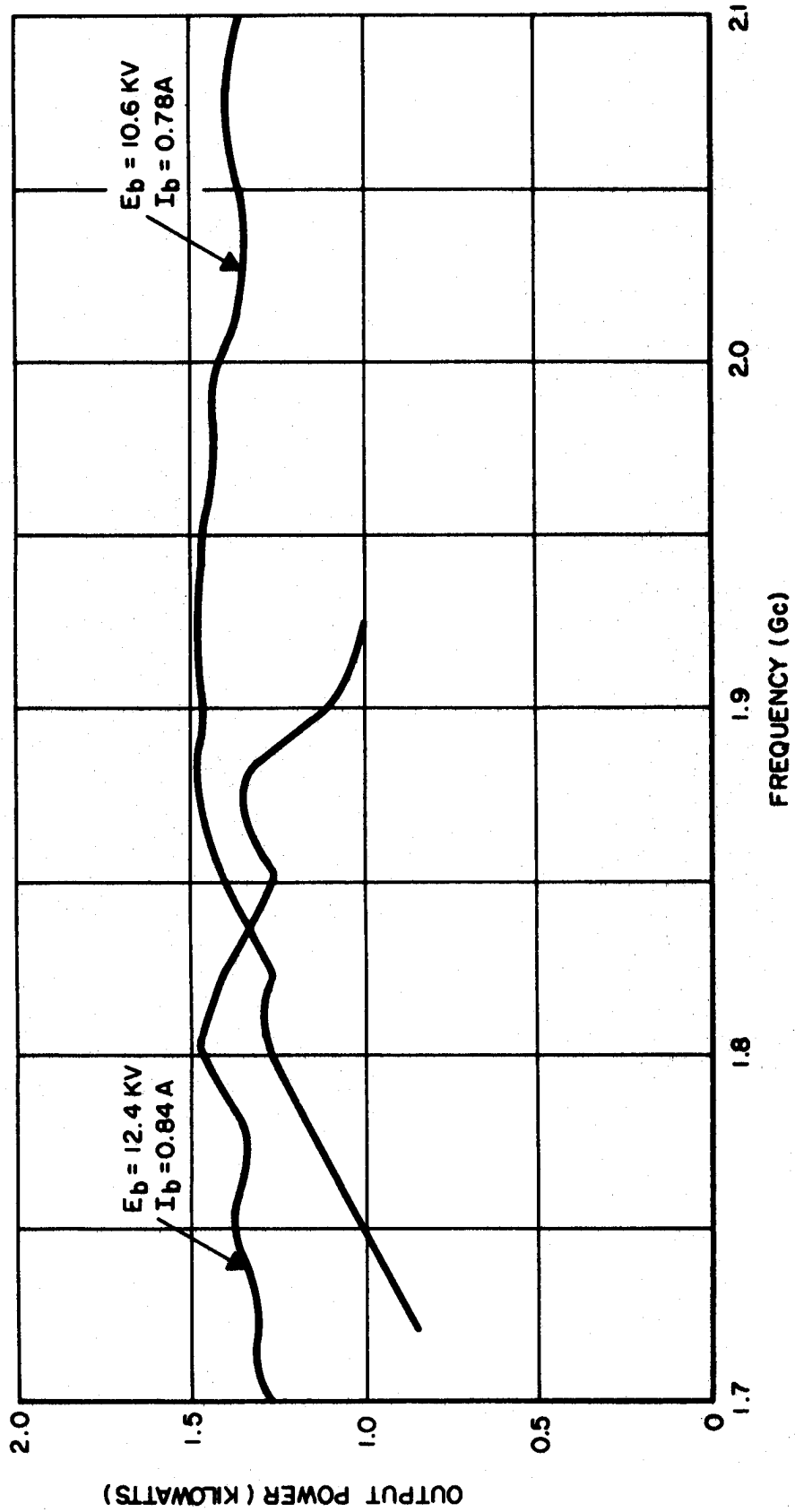
Heating Time	- - - - -	5 Min
Heater: Voltage ( $\pm 5\%$ )	- - - - -	5.6 Vac or Vdc
Current (Nominal)	- - - - -	3.8 Aac or Adc
Power Gain (Saturated)	- - - - -	20 db
Power Gain (Small Signal)	- - - - -	25 db
Output Power	- - - - -	1.1 kW
Frequency Range	- - - - -	1.7-2.1 Gc
Maximum Power Variation in any 50 Mc band (Note 1)	- - - - -	1 db

**MECHANICAL**

Maximum Dimensions:

Length	- - - - -	34 $\frac{5}{8}$ inches
Width	- - - - -	7 $\frac{1}{8}$ inches
Depth	- - - - -	7 $\frac{1}{2}$ inches
Weight (Including Electromagnet)	- - - - -	160 pounds
Input Coupling (rf)	- - - - -	Type N Coaxial
Output Coupling (rf)	- - - - -	$\frac{7}{8}$ " coaxial, EIA STD RS-225
Mounting Position	- - - - -	Any
Cooling: Forced Air and Water		<i>Flow Rate      Pressure Drop</i>
Cathode	- - - - -	20 cfm      free
Body	- - - - -	1 gpm      50 psi
Collector	- - - - -	5 gpm      10 psi
Electromagnet	- - - - -	1.5 gpm      40 psi

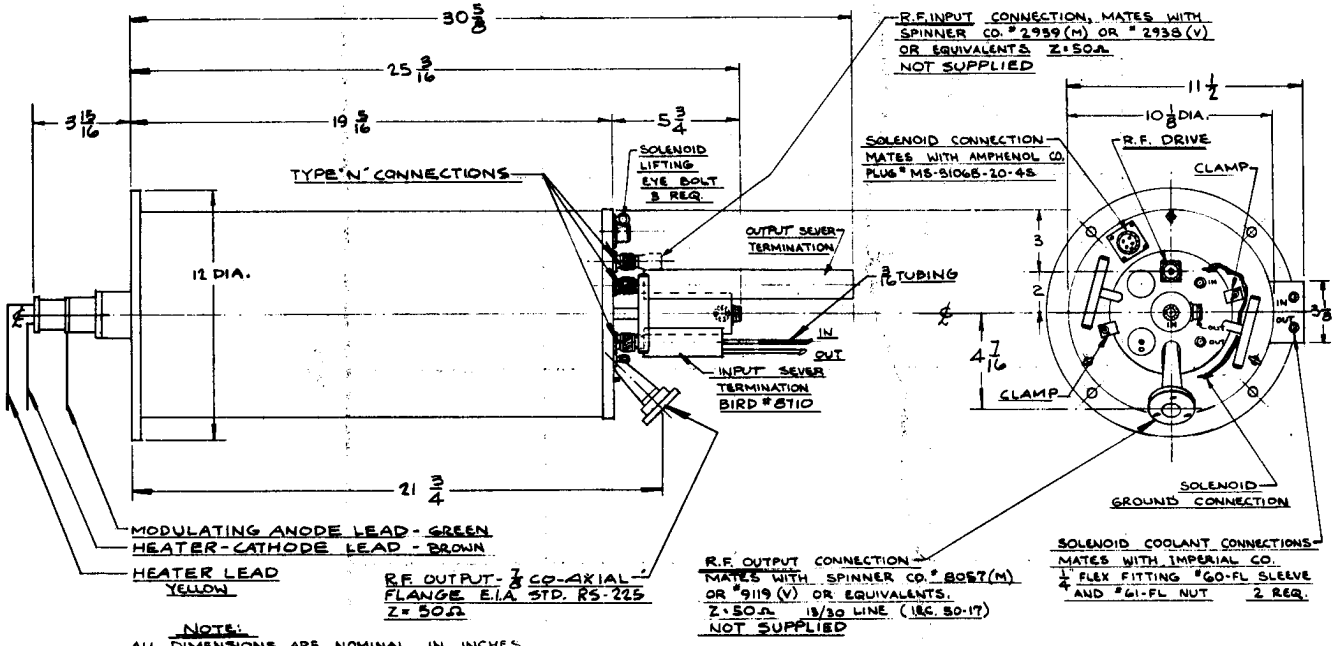




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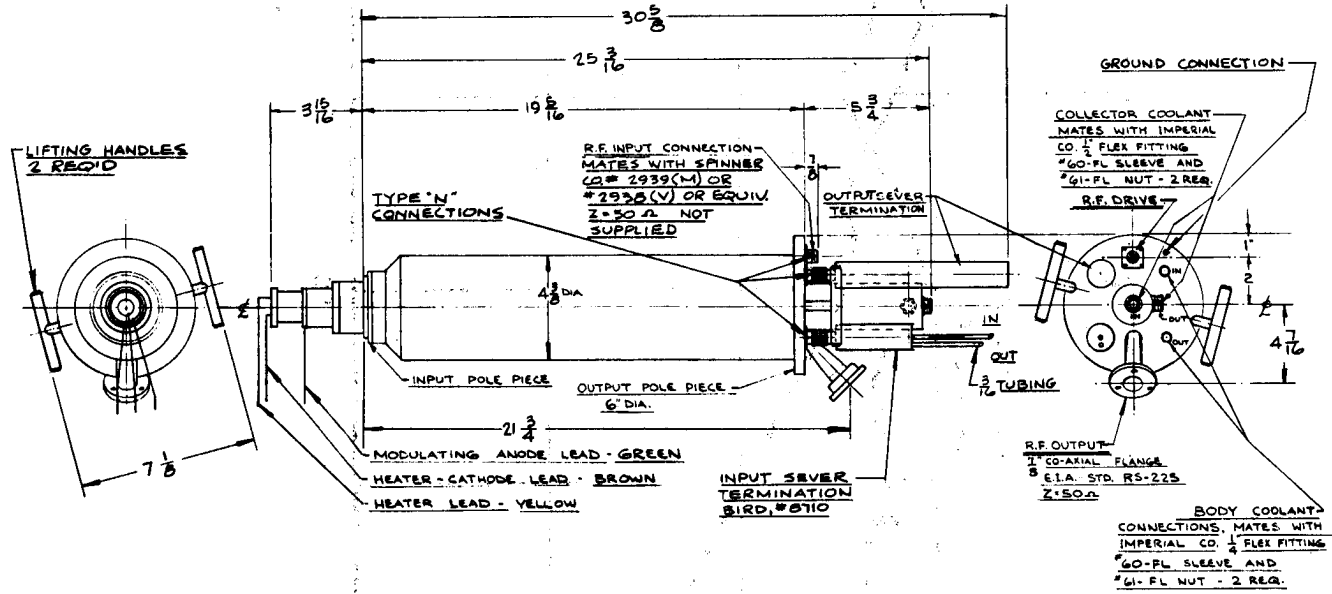


X-3034



NOTE: ALL DIMENSIONS ARE NOMINAL, IN INCHES.

X-3034 AND H-199



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X-3034 TWT