



October 5, 1945

sponsor:
 Sperry Gyroscope Co., Inc.

Type 2K31
 Velocity Modulation Amplifier/Oscillator

General Characteristics

Electrical

Cathode	Indirectly Heated
Heater Voltage (A.C. or D.C.)	6.3 volts
Heater Current	1.3 amperes

Tentative Maximum Ratings

Acceleration Voltage	2000 volts
Beam Current	60 milliamperes
Control Grid Voltage	50 volts (positive)
Control Grid Current	25 milliamperes
Beam Power Input	100 watts
Forced air cooling should be used for beam power inputs exceeding 20 watts	

Typical Operation

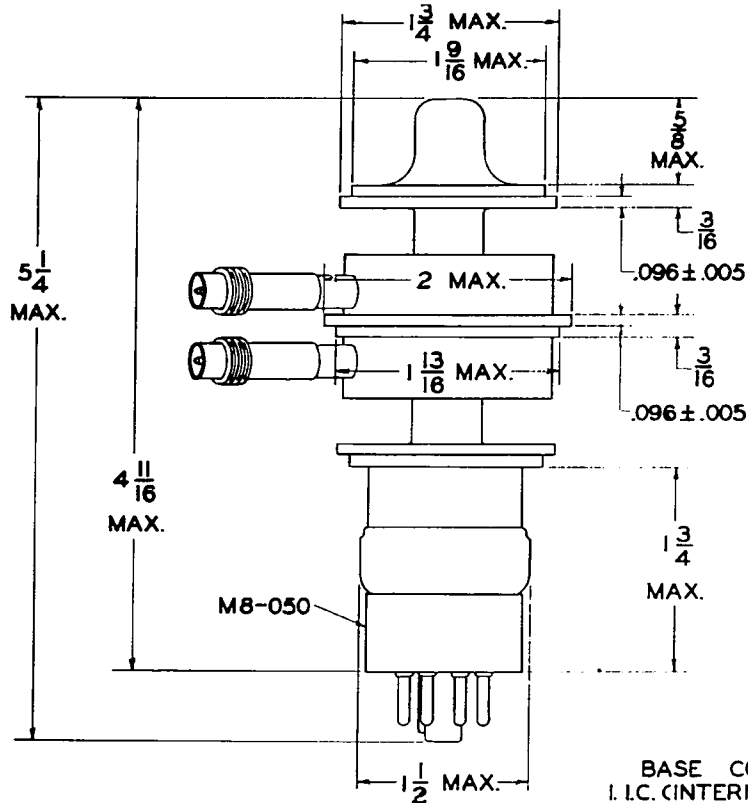
Acceleration Voltage	430 volts	1800 volts
Beam Current	20 milliamperes	50 milliamperes
Output	30-75 milliwatts	3 watts
Load Resistance	70 ohms.	
Tuning Range	9.0 cm to 11.0 cm	

Mechanical

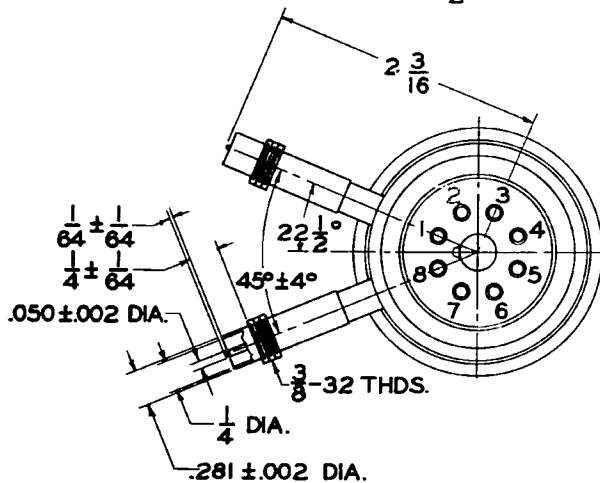
Maximum Overall Height	5 1/4 inches
Tube Body Diameter	1 3/4 inches
Maximum Diameter	3 1/16 inches
Envelope	special construction metal and glass
Base	intermediate shell octal 8 pin
Base Connection	see outline drawing
Permissible Mounting Position	any
Approximate Weight	11 ounces



RMA TYPE 2K31
 (Continued)



- BASE CONNECTIONS
1. I.C. (INTERNAL CONN.)
 2. HEATER
 3. I.C.
 4. I.C.
 5. CONTROL GRID
 6. I.C.
 7. HEATER
 8. CATHODE
- SHELL-ACCELERATOR



ALL DIMENSIONS NOMINAL
 UNLESS OTHERWISE NOTED.