TENTATIVE DATA SHEET
RAYTHEON G TYPE TUBE

TETRODE
POWER AMPLIFIER
Heater Type

Bulb: ST-14
Base: Medium Shell Octal 7-pin

DIMENSIONS

Maximum Overall Length
Maximum Diameter

4 5/8" 1 13/16"

BASING - RMA Numbering

Pin 1- No Connection
Pin 2- Heater
Pin 3- Plate
Pin 4- Screen
Pin 5- Grid
Pin 6- Omitted
Pin 7- Heater
Pin 8- Cathode

RATINGS

Heater Voltage (a-c or d-c) 6.3 volts
Heater Current 1.25 amp
Maximum Plate Voltage 135 volts
Maximum Screen Voltage 135 volts

AMPLIFIER - CLASS A

Plate Voltage 135 volts
Screen Voltage 135 volts
Grid Bias -13.5 volts
Transconductance 7000 μmhos
No-Signal Plate Current 58 ma
Max.-Signal Plate Current 60 ma
No-Signal Screen Current 3 μa
Load Resistance 2000 ohms
Power Output 3.6 watts
2nd Harmonic 2.5 percent
3rd Harmonic 9 percent

from RMA release #119, July 15, 1937

July 8, 1937. RAYTHEON ENGINEERING SERVICE CS-1441
MECHANICAL DATA

Coated unipotential cathode
Outline drawing. 14-3 Bulb. ST-14
Base. B7-12 medium shell octal 7-pin
Maximum diameter 1-13/16" 1-5/8"
Maximum overall length 4-1/16"
Maximum seated height Basing 7AC
Pin connections.
Pin 1 - No connection Pin 5 - Grid #1
Pin 2 - Heater Pin 7 - Heater
Pin 3 - Plate Pin 8 - Cathode, grid #3
Pin 4 - Grid #2
Mounting position. any

ELECTRICAL DATA

Ratings
Heater voltage (ac or dc) 6.3 volts
Maximum heater-cathode voltage
  Heater negative with respect to cathode 180 volts
  Heater positive with respect to cathode 180 volts
Maximum plate voltage, 200 volts
Maximum grid #2 supply voltage 200 volts
Maximum grid #2 voltage See J5-C4
Maximum plate dissipation 12.5 watts
Maximum grid #2 dissipation 1.75 watts
Maximum grid #1 circuit resistance
  Fixed bias 0.1 megohm
  Self bias 0.5 megohm

Typical Operating Conditions and Characteristics, Class Al Amplifier

Heater voltage 6.3 6.3 volts
Heater current 1.25 1.25 amperes
Plate voltage 135 200 volts
Grid #2 voltage 135 135 volts
Grid #1 voltage -13.5 -14 volts
Peak a-f grid #1 voltage 13.5 14 volts
Plate resistance (approx.) 9300 18,300 ohms
Transconductance 7000 7100 µhmhos
Zero-signal plate current 58 61 ma
Maximum-signal plate current 60 66 ma
Zero-signal grid #2 current 3.5 2.2 ma
Maximum-signal grid #2 current 11.5 9 ma
Load resistance 2000 2600 ohms
Total harmonic distortion (approx.) 10 10 %
Power output: 3.6 6 watts

Refer to "Interpretation of Receiving Tube Ratings"