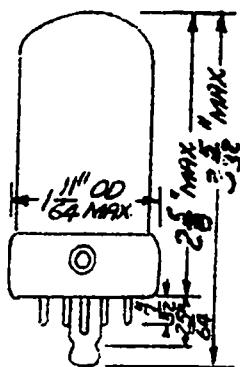


7B5

7B5

TENTATIVE DATA
RAYTHEON TYPE 7B5



PENTODE
POWER AMPLIFIER
Heater Type
Glass Bulb Loktal Base

The 7B5 is a pentode type power amplifier tube designed for service in the output stage of storage battery or a-c operated receivers.

NOMINAL RATINGS

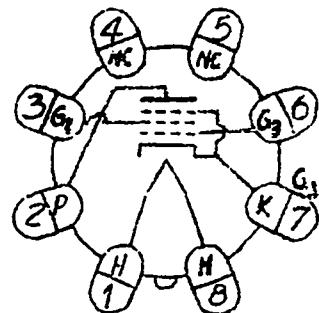
| | | |
|-----------------------------|------|-------|
| Heater Voltage (a-c or d-c) | 7.0 | volts |
| Heater Current | 0.43 | amp |
| Maximum Plate Voltage | 250 | volts |
| Maximum Screen Voltage | 250 | volts |

TYPICAL AMPLIFIER - CLASS A CONDITIONS

| | | | | | |
|--------------------------------|--------|-------|-------|-------|---------|
| Heater Voltage | 6.3 | 6.3 | 6.3 | 6.3 | volts |
| Plate Voltage | 100 | 135 | 180 | 250 | volts |
| Screen Voltage | 100 | 135 | 180 | 250 | volts |
| Grid Bias | -7 | -10 | -13.5 | -18 * | volts |
| Amplification Factor (approx.) | 150 | 150 | 150 | 150 | |
| Plate Resistance (approx.) | 103500 | 94000 | 81000 | 68000 | ohms |
| Transconductance | 1450 | 1600 | 1850 | 2200 | umhos |
| Plate Current | 9 | 12.5 | 18.5 | 32 | ma |
| Screen Current | 1.6 | 2.2 | 3 | 5.5 | ma |
| Load Resistance | 12000 | 10400 | 9000 | 7600 | ohms |
| Total Harmonic Distortion | 10 | 10 | 10 | 10 | percent |
| Power Output | 0.33 | 0.75 | 1.5 | 3.4 | watts |

Transformer or impedance input coupling devices are recommended. If resistance coupling is used, the d-c resistance in the grid circuit should not exceed 1 megohm with self-bias, or 0.1 megohm with fixed bias.

* A bias of -.16.5 volts and load resistance of 7000 ohms will give power output of 3.2 watts with 7% total harmonic distortion.



BOTTOM VIEW OF SOCKET