

6.4

U-H-F AMPI ER TRIODE GROUNDED-GRID, MINIATURE TYPE

| For use at frequ | | |
|---------------------------|--------------------|------------------------|
| Heater Coated l | Jnipotential Ca | |
| Vo1tage | 6.3 | a-c or d-c volts |
| Current | 0.4 | amp. |
| Direct Interelectrode Cap | pacitances (App | prox.1:0 |
| Plate to Cathode & Heat | ter 0.24 max. | μμf |
| Grid to Cathode & Heate | er 5.5 | μμf |
| Grid to Plate | 4 | μμf |
| Heater to Cathode | 2.8 | μμf |
| Maximum Overall Length | | 2–1/8" |
| Maximum Seated Height | | 1–7/8" |
| Length from Base Seat | | |
| to Bulb Top (excluding | tipl | 1–1/2" <u>+</u> 3/32" |
| Maximum Diameter | | 3/4" |
| Bu 1b | | T-5-1/2" |
| Base≜ | | Miniature Button 7-Pin |
| Pin 1-Grid | 0 0 | Pin 5-Grid |
| Pin 2-Cathode | | Pin 6-Grid |
| Pin 3-Heater | 9 (<u>.+</u>) 18 | Pin 7-Plate |
| Pin 4-Heater | 8/1/2 /p | |
| RCA Socket | | Stock No.9914 |
| Mounting Position | • | Any |
| | | _ • |

BOTTOM VIEW (7BQ)

Maximum Ratings Are Design-Center Values

GROUNDED-GRID AMPLIFIER

| | | | 1 |
|--------------------------------|---------------|-----------|-------|
| Plate Voltage | | 150 max. | vo1ts |
| Plate Dissipation | | 2.25 max. | watts |
| Plate Current | | 20 max. | ma. |
| D-C Heater-Cathode Potential | | 90 max. | volts |
| Typical Operation and Characte | A, Amplifier: | | |
| Plate Voltage | 100 | 150 | voits |
| Cathode-Bias Resistor* | | | |
| (Suitably by-passed) | 100 | 100 | ohms |
| Amplification Factor | 55 | 55 | |
| Plate Resistance | 5000 | 4500 | ohms |
| Transconductance | 11000 | 12000 | umhos |
| Plate Current | 10 | 15 | ma. |

o with close-fitting shield connected to grid.

The 6J4 should always be used with a cathode-bias resistor suitably by-passed. The d-c resistance in the grid circuit under maximum rated conditions should be limited to 0.25 megohm.

Afthe center hole in sockets designed for this base provides for the possibility that this tube type may be manufactured with the exhaust tube tip at the base end. For this reason, it is recommended that in equipment employing this tube type, no material be permitted to obstruct the socket hole.





5J4

U-H-F AMPLIFIER TRIODE

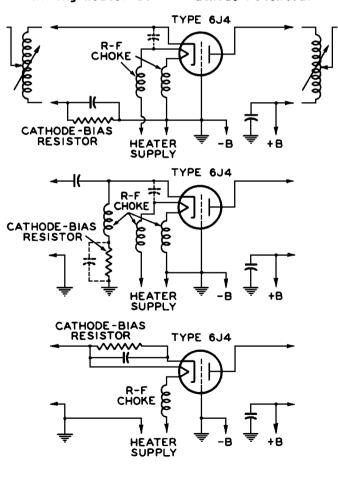
(continued from preceding page)

NOTE:

For grounded-grid operation, all three grid terminals should be grounded to minimize the effects of grid-lead inductance on u-h-f performance.

In arranging the circuit for the 6J4 used as a grounded-grid r-f amplifier or mixer, it is preferable to have the heater operate at the same r-f potential as the cathode, so that the cathode-heater capacitance will not be added across the input-circuit capacitance. Placing r-f chokes in series with the heater leads is suggested as a suitable method of operating heater and cathode at the same r-f potential.

TYPICAL GROUNDED-GRID CIRCUITS Having Heater at R-F Cathode Potential

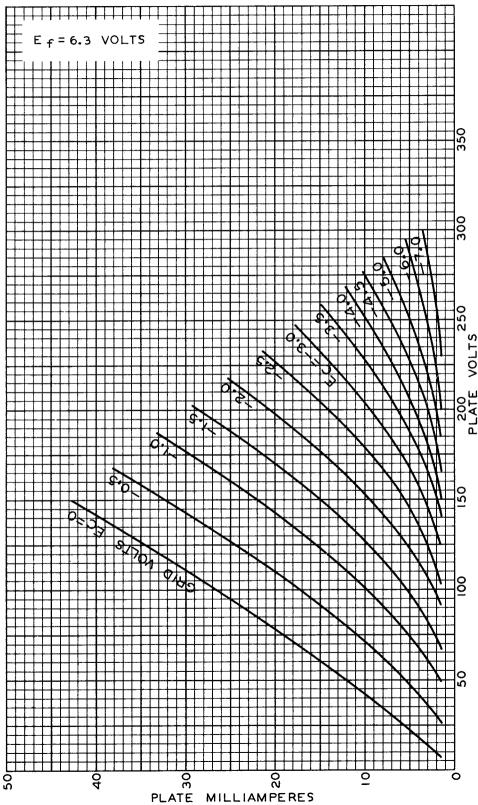


The license extended to the purchaser of tubes appears in the License Notice accompanying them. Information contained herein is furnished without assuming any obligations.

92CM-6550



AVERAGE PLATE CHARACTERISTICS



FEB.19 1944

RCA VICTOR DIVISION
RADIO CORPORATION OF AMERICA HARRISON, NEW JERSEY

92CM-6543

67/4



AVERAGE CHARACTERISTICS

