MEDIUM-MU TRIODE

For use in FM and other HF circuits

GENERAL DATA

Electrical:
Heater, for Unipotential Cathode:
  Voltage ........... 6.3 ........... ac or dc volts
  Current ........... 0.15 ........... amp
Direct Interelectrode Capacitances:
  Grid to plate ....... 1.6 \( \mu \)F
  Grid to cathode and heater ....... 1.8 \( \mu \)F
  Plate to cathode and heater ....... 1.3 \( \mu \)F

Mechanical:
Mounting Position ........... Any
Maximum Overall Length ........... 2-1/8"
Maximum Seated Length ........... 1-7/8"
Length, Base Seat to Bulb Top (Excluding tip) ....... 1-1/2" \( \pm 3/32" \\
Maximum Diameter ........... 3/4"
Bulb ........... T-5-1/2
Base ........... Small-Button Miniature 7-Pin (JETEC No. E7-1)
  Basing Designation for BOTTOM VIEW ........... 6BG

Pin 1 - Plate
Pin 2 - Internal Connection
  Do Not Use
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Plate
Pin 6 - Grid
Pin 7 - Cathode

AMPLIFIER - Class A1

Maximum Ratings, Design-Center Values:
PLATE VOLTAGE ........... 300 max. volts
PLATE DISSIPATION ........... 3.5 max. watts
PEAK HEATER-CATHODE VOLTAGE:
  Heater negative with respect to cathode ....... 200 max. volts
  Heater positive with respect to cathode ....... 200 max. volts

Characteristics:
Plate Voltage ........... 100 250 volts
Grid Voltage ........... 0 -8.5 volts
Amplification Factor ........... 19.5 17
Plate Resistance (Approx.) ........... 6250 7700 ohms
Transconductance ........... 3100 2200 \( \mu \)hos
Plate Current ........... 11.8 10.5 ma

Maximum Circuit Values:
Grid-Circuit Resistance:
  For fixed-bias operation ........... 0.25 max. megohm
  For cathode-bias operation ........... 1.0 max. megohm

\( ^0 \) With no external shield.

\( ^\circ \) See next page.

NOV. 5, 1954
TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
DATA 1
MEDIUM-MU TRIODE

Typical Operation as Resistance-Coupled Amplifier:

See RESISTANCE-COUPLED AMPLIFIER CHART No. 10
at front of this Section.

RF POWER AMPLIFIER & OSCILLATOR—Class C Telegraphy

Maximum Ratings, Design-Center Values:

| DC PLATE VOLTAGE | 300 max. volts |
| DC GRID VOLTAGE  | -50 max. volts  |
| DC PLATE CURRENT | 25 max. ma      |
| DC GRID CURRENT  | 8 max. ma       |
| PLATE DISSIPATION| 5 max. watts    |

PEAK HEATER-CATHODE VOLTAGE:

- Heater negative with respect to cathode: 200 max. volts
- Heater positive with respect to cathode: 200 max. volts

Typical Operation at Frequencies up to 50 Mc:

| DC Plate Voltage | 300 volts |
| DC Grid Voltage  | -27 volts  |
| DC Plate Current | 25 ma      |
| DC Grid Current (Approx.) | 7 ma |
| Driving Power (Approx.) | 0.35 watt |
| Useful Power Output (Approx.) | 5.5 watts |

* The dc component must not exceed 100 volts.
* Approximately 2.5 watts can be obtained when the 6C4 is used at 150 Mc
  as an oscillator with grid resistor of 10000 ohms and maximum rated input.

Indicates a change.

NOV. 5, 1954
AVERAGE PLATE CHARACTERISTICS

$E_f = 6.3$ VOLTS

PLATE ($I_b$) OR GRID ($I_c$) MILLIAMPERES