



12AQ5



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## BEAM POWER AMPLIFIER

Zero-Signal Grid-No.2 Current (Approx.) . . . . .	3	4.5	ma
Max.-Signal Grid-No.2 Current (Approx.) . . . . .	4	7	ma
Plate Resistance (Approx.) . . .	58000	52000	ohms
Transconductance . . . . .	3700	4100	$\mu$ hos
Load Resistance . . . . .	5500	5000	ohms
Total Harmonic Distortion . . . .	8	8	per cent
Max.-Signal Power Output . . . . .	2.0	4.5	watts

### Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed bias . . . . .	0.1 max.	megohm
For cathode bias . . . . .	0.5 max.	megohm

### AF POWER AMPLIFIER - Class AB<sub>1</sub>

### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE . . . . .	250 max.	volts
GRID-No.2 (SCREEN) VOLTAGE . . . . .	250 max.	volts
PLATE DISSIPATION . . . . .	12 max.	watts
GRID-No.2 INPUT . . . . .	2 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode .	90 max.	volts
Heater positive with respect to cathode .	90 max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)*	250 max.	$^{\circ}$ C

### Typical Operation:

*Unless otherwise indicated, values are for 2 tubes*

Plate Voltage . . . . .	250	volts
Grid-No.2 Voltage . . . . .	250	volts
Grid-No.1 (Control-Grid) Voltage# . . . . .	-15	volts
Peak AF Grid-No.1-to-Grid-No.1 Voltage . . .	30	volts
Zero-Signal Plate Current . . . . .	70	ma
Max.-Signal Plate Current . . . . .	79	ma
Zero-Signal Grid-No.2 Current (Approx.) . . .	5	ma
Max.-Signal Grid-No.2 Current (Approx.) . . .	13	ma
Plate Resistance (Approx. per tube) . . . . .	60000	ohms
Transconductance (Per tube) . . . . .	3750	$\mu$ hos
Effective Load Resistance (Plate to plate) .	10000	ohms
Total Harmonic Distortion . . . . .	5	per cent
Max.-Signal Power Output . . . . .	10	watts

\* High ambient temperature and shielding may necessitate a reduction in operating dissipation. When tube shields are used, it is advisable to paint the inside and outside surfaces of the tube shield a dull black and to provide ventilation slots to reduce operating temperature.

#: See next page.

AUG. 1, 1953

TUBE DEPARTMENT

TENTATIVE DATA 1

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



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## Maximum Circuit Values Per Tube:▲

### Grid-No.1-Circuit Resistance:\*

For fixed bias . . . . .	0.1 max.	megohm
For cathode bias . . . . .	0.5 max.	megohm

\* The type of input coupling used should not introduce too much resistance in the grid-No.1 circuit. Transformer- or impedance-coupling devices are recommended.

▲ If the grid-No.1-circuit resistance is common to two tubes, the indicated maximum values per tube should be halved.

*Curves shown under Type 6V6 also apply to 12AQ5*