

## RCA-49

### DUAL-GRID POWER AMPLIFIER

|                        |               |              |
|------------------------|---------------|--------------|
| Filament Voltage       | Coated<br>2.0 | d-c volts    |
| Filament Current       | 0.120         | amp.         |
| Maximum Overall Length |               | 4-11/16"     |
| Maximum Diameter       |               | 1-13/16"     |
| Bulb                   |               | ST-14        |
| Base                   |               | Medium 5-Pin |

|                 |  |                 |
|-----------------|--|-----------------|
| Pin 1-Filament+ |  | Pin 4-Grid #2   |
| Pin 2-Plate     |  | Pin 5-Filament- |
| Pin 3-Grid #1   |  |                 |

BOTTOM VIEW

#### CLASS B POWER AMPLIFIER

*Grids #1 & #2 connected together at socket*

|  |          |                  |
|--|----------|------------------|
| Plate Voltage                              | 180 max. | volts            |
| Peak Plate Current                         | 50 max.  | ma.              |
| Typical Operation (2 tubes):               |          |                  |
| Filament                                   | 2.0      | 2.0 volts        |
| Plate                                      | 135      | 180 volts        |
| Grid (#1 & #2 tied together)               | 0        | 0 volts          |
| Zero-Sig. Plate Cur. (per tube)            | 1.3      | 2 ma.            |
| Load Resistance (per tube)                 | 2000     | 3000 ohms        |
| Effective Load Resistance (plate to plate) | 8000     | 12000 ohms       |
| Power Output (2 tubes)                     | 2.3      | 3.5 approx.watts |

#### CLASS A AMPLIFIER

*Grid #2 connected to plate at socket*

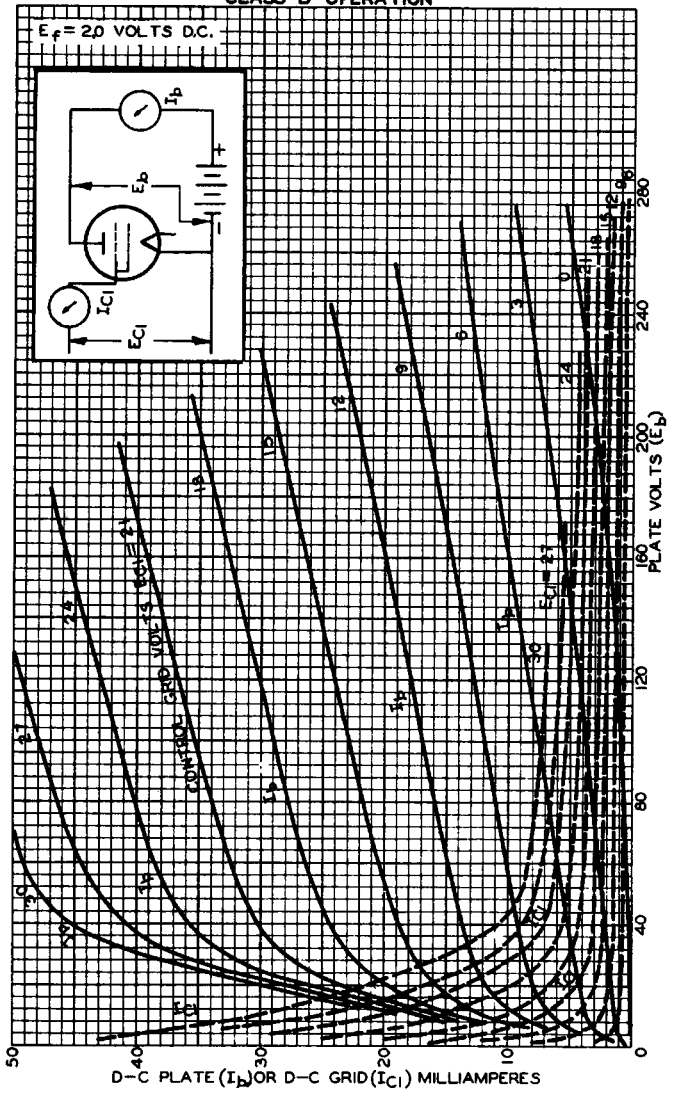
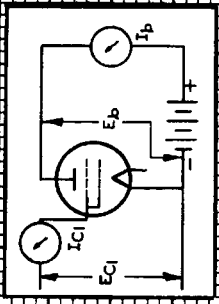
#### Operating Conditions and Characteristics:

|                |          |              |
|----------------|----------|--------------|
| Filament       | 2.0      | volts        |
| Plate          | 135 max. | volts        |
| Grid (#1 only) | -20      | volts        |
| Amp. Fact.     | 4.7      |              |
| Plate Res.     | 4175     | ohms         |
| Mut. Cond.     | 1125     | µmhos        |
| Plate Cur.     | 6.0      | ma.          |
| Load Res.      | 11000*   | ohms         |
| Power Output   | 0.170    | approx.watts |

\* Approximately twice this value is recommended for load of this tube when used as driver for Class B stage.

AVERAGE PLATE CHARACTERISTICS CLASS B OPERATION

$E_f = 2.0$  VOLTS D.C.



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AVERAGE PLATE CHARACTERISTICS  
CLASS A OPERATION

$E_f = 2.0$  VOLTS D.C.

