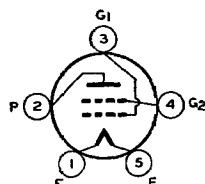


RCA-49

DUAL-GRID POWER AMPLIFIER

The 49 is a double-grid power amplifier tube designed for use in battery-operated receivers employing 2-volt tubes. In such service, it may be used either as a Class B output tube or, by a change in socket connections, as a Class A driver tube.



CHARACTERISTICS

FILAMENT VOLTAGE (D. C.)	2.0	Volts
FILAMENT CURRENT	0.12	Ampere
BULB		ST-14
BASE		Medium 5-Pin

As Class B Power Amplifier

(Grids No. 1 and No. 2 connected together at socket)

PLATE VOLTAGE	180 max.	Volts
PEAK PLATE CURRENT	50 max.	Milliamperes
TYPICAL OPERATION (2 tubes)		

Values are for two tubes.

Plate Voltage	135	180	Volts
Grid Voltage	0	0	Volts
Zero-Signal Plate Current	2.6	4	Milliamperes
Effective Load Resistance (Plate-to-plate)	8000	12000	Ohms
Power Output Approximate	2.3	3.5	Watts

As Driver—Class A₁ Amplifier

(Grid No. 2 connected to plate at socket)

PLATE VOLTAGE	135 max.	Volts
GRID VOLTAGE	-20	Volts
PLATE CURRENT	6.0	Milliamperes
PLATE RESISTANCE	4175	Ohms
AMPLIFICATION FACTOR	4.7	
TRANSCONDUCTANCE	1125	Micromhos
LOAD RESISTANCE	11000*	Ohms
POWER OUTPUT (Approximate)	0.170	Watt

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

INSTALLATION AND APPLICATION

The base pins of the 49 fit the standard five-contact socket which should be installed to hold the tube in a vertical position. In some cases, cushioning of the socket may be found desirable. For filament operation, refer to INSTALLATION on type 1A6. Refer to APPLICATION for type 46. Plate characteristics curves are given on the following page.

