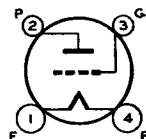


RCA-31

POWER AMPLIFIER

The 31 is a power-amplifier tube of the three-electrode type for battery-operated radio receivers where economy of filament-current drain is important.



CHARACTERISTICS

FILAMENT VOLTAGE (D. C.)	2.0	Volts
FILAMENT CURRENT	0.130	Ampere
PLATE VOLTAGE	135	180 max. Volts
GRID VOLTAGE	-22.5	-30 Volts
PLATE CURRENT	8.0	12.3 Milliamperes
PLATE RESISTANCE	4100	3600 Ohms
AMPLIFICATION FACTOR	3.8	3.8
TRANSCONDUCTANCE	925	1050 Micromhos
LOAD RESISTANCE	7000	5700 Ohms
SELF-BIAS RESISTOR	2815	2440 Ohms
UNDISTORTED POWER OUTPUT	0.185	0.375 Watt
GRID-PLATE CAPACITANCE		5.7 μmf
GRID-FILAMENT CAPACITANCE		3.5 μmf
PLATE-FILAMENT CAPACITANCE		2.7 μmf
BULB		ST-12
BASE		Small 4-Pin

INSTALLATION

Refer to INSTALLATION on type 30.

APPLICATION

As a power amplifier, the 31 should be operated as shown under CHARACTERISTICS. Grid voltage may be obtained from a C-battery, or by means of a self-bias resistor connected in the negative plate-return lead. The latter method is required where a grid resistor (maximum value 1 megohm) is used. If more output is desired than can be obtained from a single 31, two 31's may be operated either in parallel or push-pull connection.

