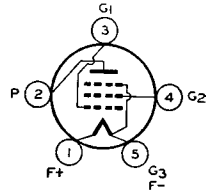


# RCA-33

## POWER-AMPLIFIER PENTODE

The 33 is a power-amplifier pentode for use in the output stage of battery-operated receivers where economy of battery consumption is important.



### CHARACTERISTICS

FILAMENT VOLTAGE (D. C.)	2.0	Volts
FILAMENT CURRENT	0.260	Ampere
PLATE VOLTAGE	135	180 max. Volts
SCREEN VOLTAGE (Grid No. 2)	135	180 max. Volts
GRID VOLTAGE (Grid No. 1)	-13.5	-18 Volts
PLATE CURRENT	14.5	22 Milliampere
SCREEN CURRENT	3	5 Milliampere
PLATE RESISTANCE	50000	55000 Ohms
AMPLIFICATION FACTOR (Approx.)	70	90
TRANSCONDUCTANCE	1450	1700 Micromhos
LOAD RESISTANCE	7000	6000 Ohms
SELF-BIAS RESISTOR	770	670 Ohms
POWER OUTPUT (7% total harmonic distort.)	0.7	1.4 Watts
BULB		ST-14
BASE		Medium 5-Pin

### INSTALLATION AND APPLICATION

The base pins of the 33 fit the standard five-contact socket. The socket 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 for type 1A6.

For the power amplifier stage of radio receivers, the 33 is recommended either singly or in push-pull combination. More than one audio stage preceding the 33 is undesirable because of the possibility of microphonic disturbances resulting from the high level of amplification. Transformer or impedance coupling devices are preferable. If resistance coupling is employed, the d-c resistance in the grid circuit should not exceed 1.0 megohm under self-bias conditions; without self-bias, the maximum value is 0.5 megohm.

AVERAGE PLATE CHARACTERISTICS

