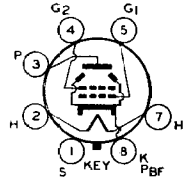


RCA-25L6

BEAM POWER AMPLIFIER



The 25L6 is a power-amplifier tube of the All-Metal type for use in the output stage of "transformerless" (a.c.-d.c.) radio receivers, especially those designed to have ample reserve of power-delivering ability. The new tube provides high power output at the relatively low plate and screen voltages available for transformerless receivers. The high power output is obtained with high power sensitivity and high efficiency.

These distinctive features have been made possible by the application of directed-electron-beam principles in the design of the 25L6. The design is similar to that of the RCA-6L6 with the difference that the 25L6 is intended for operation in a.c.-d.c. receivers.

TENTATIVE CHARACTERISTICS

HEATER VOLTAGE (A. C. or D. C.).....	25.0	Volts
HEATER CURRENT	0.3	Ampere
BASE	Small Wafer	Octal 7-Pin

As Single-Tube Class A₁ Amplifier

PLATE VOLTAGE	110	110	Volts
SCREEN VOLTAGE (Grid No. 2).....	110	110	Volts
GRID VOLTAGE (Grid No. 1).....	-7.5	-7.5	Volts
PEAK A-F GRID VOLTAGE.....	7.5	7.5	Volts
ZERO-SIGNAL PLATE CURRENT.....	49	49	Milliamperes
MAX.-SIGNAL PLATE CURRENT.....	54	50	Milliamperes
ZERO-SIGNAL SCREEN CURRENT.....	4	4	Milliamperes
MAX.-SIGNAL SCREEN CURRENT.....	9	11	Milliamperes
PLATE RESISTANCE (Approx.).....	10000	10000	Ohms
TRANSCONDUCTANCE	8200	8200	Micromhos
LOAD RESISTANCE	1500	2000	Ohms
DISTORTION:			
Total Harmonic	11	10	Per cent
Second Harmonic	10	3.5	Per Cent
Third Harmonic	4	8.5	Per cent
POWER OUTPUT	2.1	2.2	Watts

INSTALLATION

The base pins of the 25L6 fit the standard octal-base socket which may be installed to hold the tube in any position. For heater operation and cathode connection, refer to type 25A6.

APPLICATION

The 25L6 should be operated as shown under CHARACTERISTICS. The values have been determined on the basis that grid current does not flow during any part of the input cycle. The type of input coupling used should not introduce too much resistance in the grid circuit. Transformer- or impedance-coupling devices are recommended. When the grid circuit has a d-c resistance not higher than 0.1 megohm, fixed bias may be used; for higher values, self-bias is required. With self-bias, the grid circuit may have a d-c resistance as high as, but not greater than 0.5 megohm. A family of plate characteristic curves is given on the preceding page.