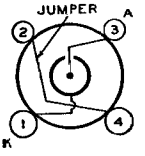
RCA-874



VOLTAGE REGULATOR

The 874 is a voltage regulator tube designed to maintain constant d-c output from rectifier devices for varying values of d-c load current.

CHARACTERISTICS

Starting Supply Voltage (D. C.)	125 *min.*	Volts
Operating Voltage (D. C.)	90	Volts
Operating Current (D. C.)	10 to 50	Milliamperes
Continuous Current (D. C.)	50 *max.*	Milliamperes
Maximum Overall Length	5⅝	Inches
Maximum Diameter	2 1/16	Inches
Bulb		S-17
Base		Medium 4-Pin Bayonet

INSTALLATION AND APPLICATION

The base pins of the 874 fit the standard four-contact socket. Pins No. 2 and No. 4 are connected together within the base; the connection is used as a link in the primary circuit of the power transformer to prevent the application of voltage when the 874 is removed from its socket.

Sufficient resistance must always be used in series with the 874 to limit the current to 50 milliamperes when no load current is being drawn from the rectifier.

This type is used principally for renewal purposes.

RCA-876, RCA-886

CURRENT REGULATORS

The 876 and 886 are, within their ranges of operation, constant-current regulating devices.

CHARACTERISTICS

	Type 876	*Type 886*	
Voltage Range	40 to 60	40 to 60	Volts
Operating Current	1.7	2.05	Amperes
Ambient Temperature (Fahrenheit)	150	150	Degrees
Maximum Overall Length	8	8	Inches
Maximum Diameter	2 1/16	2 1/16	Inches
Bulb	T-16	T-16	
Base	Mogul Screw	Mogul Screw	

INSTALLATION AND APPLICATION

The bases of these types fit the standard mogul screw socket which may be installed to hold the tubes in any position. These tubes operate at a high bulb temperature and must be surrounded by a metal ventilating stack.

Either type may be used in series with the primary of a suitably designed transformer (or with a resistive load) to maintain essentially constant input voltage to the primary (or load) over a range of line voltage variation of 20 volts. The primary of the transformer should be designed for a voltage input equal to the average line voltage minus 50 volts. The primary current of the transformer should be 1.7 amperes for the 876 and 2.05 amperes for the 886. If less than this current is drawn, adjustment to the rated value must be made either by a shunt resistor or increased load on the secondary. Two or more of these tubes are required if the current drawn is more than the rated values.

These two types are used principally for renewal purposes.