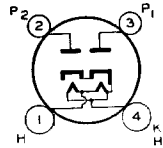


RCA-83-v

FULL-WAVE RECTIFIER



The 83-v is a high-vacuum, full-wave rectifier tube of the heater-cathode type. It is intended for use in suitable rectifying devices designed to supply d-c power to receivers having large d-c requirements. The excellent voltage regulation characteristic of the 83-v is due to the close spacing of the cathode and plate.

CHARACTERISTICS

HEATER VOLTAGE (A. C.).....	5.0	Volts
HEATER CURRENT	2.0	Amperes
A-C PLATE VOLTAGE PER PLATE.....	400 max.	Volts
PEAK INVERSE VOLTAGE.....	1100 max.	Volts
D-C OUTPUT CURRENT.....	200 max.	Milliamperes
BULB		ST-14
BASE		Medium 4-Pin

INSTALLATION

The base pins of the 83-v fit the standard four-contact socket which may be mounted to hold the tube in any position.

The bulb becomes hot during continuous operation. Provision should be made for adequate natural ventilation to prevent overheating.

The heater is designed to operate from the a-c line through a step-down transformer. The voltage applied to the heater should be the rated value of 5.0 volts under operating conditions and average line voltage. The heater leads should have as low resistance as practical.

The cathode of the 83-v is connected to the heater within the tube.

APPLICATION

As a full-wave rectifier, the 83-v is useful for supplying large amounts of d-c power to receivers, particularly those in which the d-c requirements cause considerable variation in the load impressed on the rectifier tube.

Filter circuits of either the choke-input or the condenser-input type may be employed, provided the maximum voltages and currents tabulated under CHARACTERISTICS are not exceeded. The choke-input type of circuit is to be preferred from the standpoint of obtaining the maximum continuous d-c output current from the 83-v under the most favorable conditions.

For discussion of rectifiers and filter circuits, refer to pages 24 and 37, respectively.

