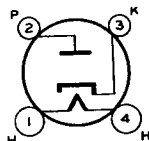


# RCA-1-v

## HALF-WAVE RECTIFIER



The 1-v is a half-wave, high-vacuum rectifier tube employing a heater cathode. It is intended for use in radio equipment of either the "universal" or the automobile type designed for its characteristics. The low voltage drop of this tube makes it uniquely adapted to such service. The 1-v is interchangeable with type 1.

### CHARACTERISTICS

|                                      |             |              |
|--------------------------------------|-------------|--------------|
| HEATER VOLTAGE (A. C. or D. C.)..... | 6.3         | Volts        |
| HEATER CURRENT .....                 | 0.3         | Ampere       |
| A-C PLATE VOLTAGE (RMS).....         | 350 max.    | Volts        |
| PEAK INVERSE VOLTAGE.....            | 1000 max.   | Volts        |
| D-C OUTPUT CURRENT.....              | 50 max.     | Milliamperes |
| BULB .....                           | ST-12       |              |
| BASE .....                           | Small 4-Pin |              |

### INSTALLATION

The base pins of the 1-v fit the standard four-contact socket which may be installed to hold the tube in any position.

For heater operation, refer to type 6A8. The d-c potential between heater and cathode should never exceed 500 volts.

### APPLICATION

The filter may be either of the condenser-input or the choke-input type provided the recommended maximum plate voltage and output current ratings given under CHARACTERISTICS are not exceeded.

If the condenser-input type of filter is used, consideration must be given to the instantaneous peak value of the a-c input voltage which, for a sinusoidal wave, is about 1.4 times the RMS value as measured with an a-c voltmeter. It is important, therefore, that the filter condensers (especially the input condenser) have a sufficiently high breakdown rating to withstand this instantaneous peak value. Particular attention must be given to this point when the waveshape input to the plates of the rectifier tube is non-sinusoidal.

When the input-choke method is used, the available d-c output voltage will be somewhat lower than with the input-condenser method for a given a-c plate voltage. However, improved regulation, together with lower peak current, will be obtained.

