



82



82

### FULL-WAVE MERCURY-VAPOR RECTIFIER

Filament	Coated	
Voltage	2.5	a-c volts
Current	3.0	amp.
Maximum Overall Length		4-11/16"
Maximum Seated Height		4-1/16" ←
Maximum Diameter		1-13/16"
Bulb		ST-14
Base		Medium 4-Pin
Pin 1-Filament		Pin 3-Plate #1
Pin 2-Plate #2		Pin 4-Filament
Mounting Position		Vertical, base down



BOTTOM VIEW (4C)

#### FULL-WAVE RECTIFIER

Peak Inverse Voltage	1550 max. volts
Peak Plate Current per Plate	600 max. ma.
Condenser Mercury Temperature Range	24° - 60°C
<i>With Condenser-Input Filter:</i>	
A-C Plate Voltage per Plate (RMS)	450 max. volts
Total Effective Plate-Supply Impedance per Plate <sup>▲</sup>	50 min. ohms
D-C Output Current	115 max. ma.
<i>With Choke-Input Filter:</i>	
A-C Plate Voltage per Plate (RMS)	550 max. volts
Input-Choke Inductance	6 min. henries
D-C Output Current	115 max. ma.
Tube Voltage Drop	15 approx.volts

#### HALF-WAVE RECTIFIER

As a half-wave rectifier, the 82 is operated with plates connected in parallel. Two 82's so connected in a full-wave circuit can supply twice the output current of a single tube. Both plates within the same tube should be connected to the same terminal of the plate transformer. To equalize the current distribution between plates, a resistor of not less than 100 ohms should be connected in series with each plate.

<sup>▲</sup> When a filter-input condenser larger than 40  $\mu$ f is used, it may be necessary to use more plate-supply impedance than the minimum value shown to limit the peak plate current to the rated value.

← Indicates a change.

Sept. 2, 1941

RCA RADIOTRON DIVISION  
RCA MANUFACTURING COMPANY, INC.

DATA