



5R4-GY

5R4-GY FULL-WAVE VACUUM RECTIFIER

GENERAL DATA

Electrical:

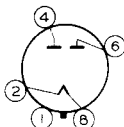
Filament, Coated:*

Voltage. 5 ac or dc volts
Current. 2 amp

Mechanical:

Mounting Position. Vertical, or Horizontal with pins
1 and 4 in vertical plane
Maximum Overall Length 5-5/16"
Maximum Seated Length. 4-3/4"
Maximum Diameter 2-1/16"
Bulb ST-16
Base Medium-Shell Octal 5-Pin, Micanol
Basing Designation for BOTTOM VIEW G-5T

Pin 1—No Connection
Pin 2—Filament
Pin 4—Plate No.2



Pin 6—Plate No.1
Pin 8—Filament

FULL-WAVE RECTIFIER

Maximum Ratings, Design-Center Values:

	<u>For Altitudes up to 40000 ft.</u>		<u>For Altitudes up to 20000 ft.</u>
PEAK INVERSE PLATE VOLT. (No Load)	2100 max.	2400 max.	2800 max. volts
PEAK PLATE CURRENT PER PLATE . . .	650 max.	650 max.	650 max. ma
DC OUTPUT CURRENT:			
With capacitor input to filter	250 max.	175 max.	150 max. ma
With choke input to filter . . .	250 max.	250 max. ⁰	175 max. [•] ma

Typical Operation with Capacitor-Input Filter:

	<u>For Altitudes up to 40000 ft.</u>		<u>For Altitudes up to 20000 ft.</u>
AC Plate-to-Plate Supply Voltage (RMS):			
Full Load . . .	1400 . .	1500 . .	1800 . . volts
No Load.	1500 . .	1700 . .	2000 . . volts
Filter Input			
Capacitor. . .	4 . .	4 . .	4 . . μf

* See curve for conditions necessitating delay in application of plate voltage until filament has reached operating temperature.

0, •: See next page.

← Indicates a change.

SEPT. 30, 1948

TUBE DEPARTMENT

DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

5R4-GY



5R4-GY

FULL-WAVE VACUUM RECTIFIER

	<u>For Altitudes up to 40000 ft.</u>		<u>For Altitudes up to 20000 ft.</u>	
Total Effect. Plate-Supply Impedance per Plate [▲] . . .	125	500	575	ohms
DC Output Current.	250	150	150	ma
DC Output Volt. at Input to Filter:				
At Half Load . .	790*	900*	1060*	volts
At Full Load . .	700*	810*	950*	volts
Voltage Regulation, Half-Load to Full-Load Current . .	90*	90*	110*	volts

→ Typical Operation with Choke-Input Filter:

	<u>For Altitudes up to 40000 ft.</u>	<u>For Altitudes up to 20000 ft.</u>
AC Plate-to-Plate Supply Voltage (RMS):		
Full Load.	1500	1900 . . volts
No Load.	1700	2000 . . volts
Filter Input Choke	5	10 . . henries
DC Output Current.	250	175 . . ma
DC Output Voltage at Input to Filter:		
At Half Load	590*	810* . . volts
At Full Load	550*	750* . . volts
Voltage Regulation, Half-Load to Full-Load Current	40*	60* . . volts

○ For choke not less than 5 henries.

● For choke not less than 10 henries.

▲ Indicated values for conditions shown will limit peak plate current to max. rated value. When a filter-input capacitor larger than $\frac{1}{2}$ μ f is used, it may be necessary to use more plate-supply impedance than the value shown to limit the peak plate current to the rated value.

* values are approximate.

→ indicates a change.

SEPT. 30, 1948

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

DATA

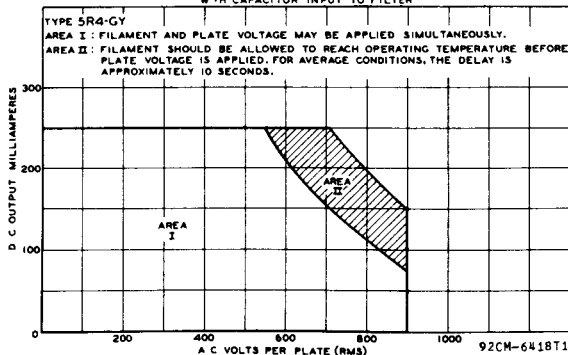


5R4-GY

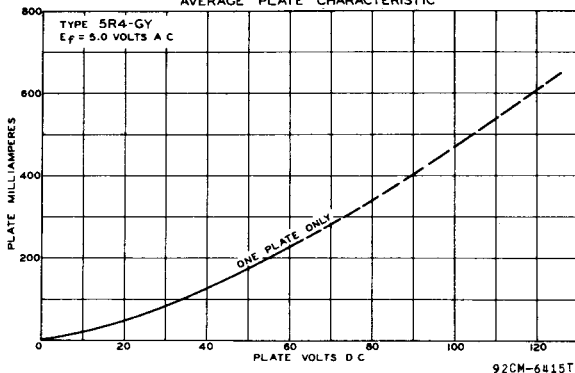
FULL-WAVE VACUUM RECTIFIER

5R4-GY

OPERATION CHARACTERISTICS
WITH CAPACITOR INPUT TO FILTER



AVERAGE PLATE CHARACTERISTIC

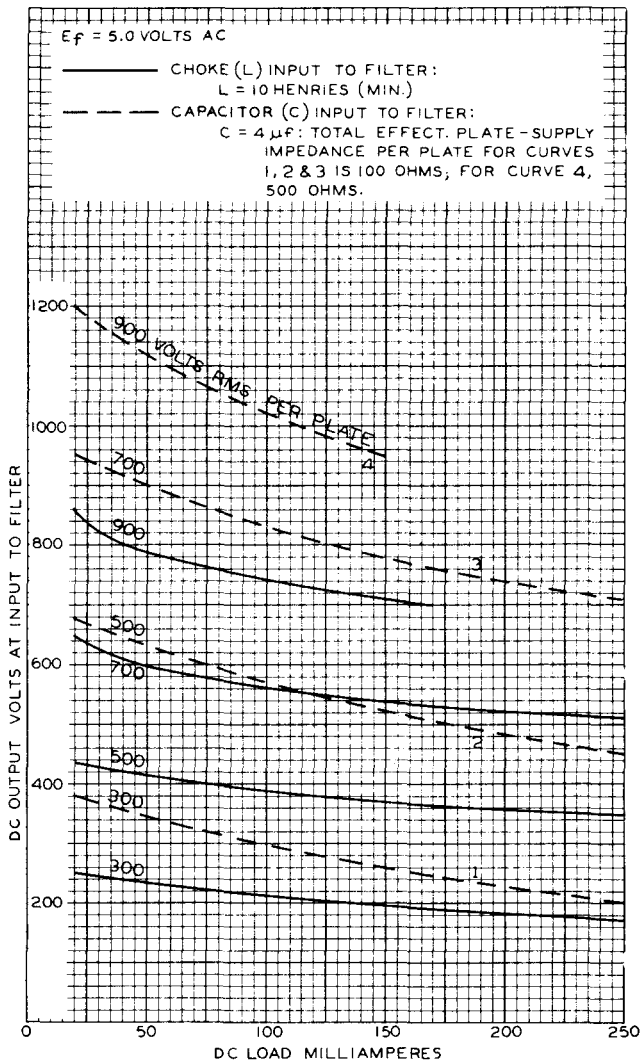


5R4-GY



5R4-GY

OPERATION CHARACTERISTICS



SEPT. 30, 1948

TUBE DEPARTMENT

RADIO CORPORATION OF AMERICA HARRISON, NEW JERSEY

92CM-6416R2