

# 5U4GB

## Full-Wave Vacuum Rectifier

### GENERAL DATA

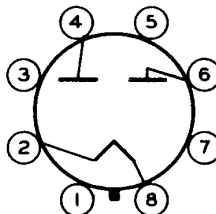
#### Electrical:

Filament, Coated:  
 Voltage (AC or DC) . . . . . 5 volts  
 Current . . . . . 3 amp

#### Mechanical:

Operating Position. . . . . Vertical, base down or up, or  
 Horizontal with pins 1 and 4 in vertical plane  
 Maximum Overall Length. . . . . 4-5/8"  
 Maximum Seated Length . . . . . 4-1/16"  
 Diameter. . . . . 1.438" to 1.562"  
 Bulb. . . . . T12  
 Base. . . . . Short Medium-Shell Octal 5-Pin  
 with External Barriers, Style B, Arrangement 1  
 (JEDEC Group 1, No. B5-121), or  
 Short Medium-Shell Octal 8-Pin  
 with External Barriers, Style B (JEDEC Group 1, No. B8-118)  
 Basing Designation for BOTTOM VIEW. . . . . 5T

Pin 1 - No Connection  
 Pin 2 - Filament  
 Pin 3<sup>a</sup> - No Connection



Pin 4 - Plate No. 2  
 Pin 5 - Same as Pin 3  
 Pin 6 - Plate No. 1  
 Pin 7 - Same as Pin 3  
 Pin 8 - Filament

### FULL-WAVE RECTIFIER

#### Maximum Ratings, Design-Center Values:

*For power-supply frequencies of 25 to 1000 cps*

PEAK INVERSE PLATE VOLTAGE. . . . . 1550 max. volts  
 AC PLATE SUPPLY VOLTAGE PER PLATE  
 (RMS, without load) . . . . . See Rating Chart I  
 STEADY-STATE PEAK PLATE CURRENT  
 PER PLATE (See Rating Chart II) . . . . . 1 max. amp  
 TRANSIENT PEAK PLATE CURRENT  
 PER PLATE (See Rating Chart III). . . . . 4.6 max. amp  
 DC OUTPUT CURRENT . . . . . See Rating Chart I

#### Typical Operation:

*With capacitor- With choke-  
 input filter input filter*

AC Plate-to-Plate Supply Voltage (RMS, without load) . .	600	900	1100	volts
Filter-Input Capacitor <sup>b</sup> .	40	40	-	μf
Filter-Input Choke. . . .	-	-	10	henrys

← Indicates a change.



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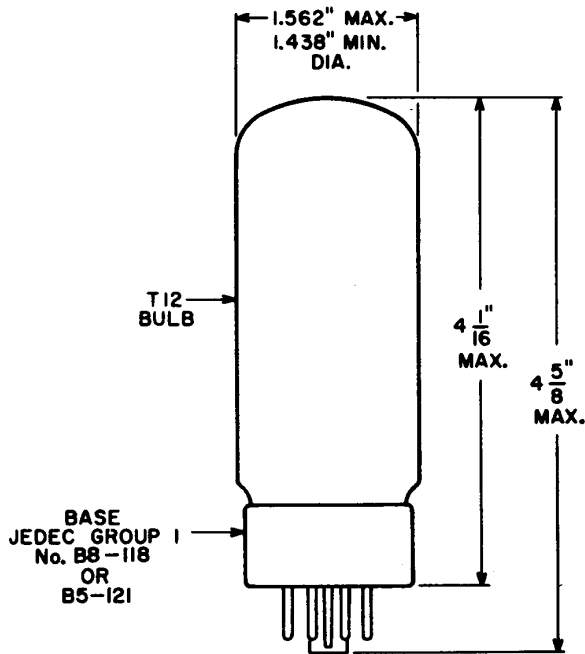
Total Effective Plate Supply Impedance					
Per Plate . . . . .	21	67	-	ohms	
DC Output Voltage at input to filter . . . . .					
	290	460	420	volts	
DC Output Current . . . . .					
	300	275	275	ma	

→ **Characteristics:**

Tube Voltage Drop for plate ma. (Per plate) =					
225 . . . . .				44	volts
275 . . . . .				50	volts
300 . . . . .				54	volts

- <sup>a</sup> On the 5-pin base, pins 3, 5, and 7 are omitted.
- <sup>b</sup> Values of capacitance greater than 40  $\mu$ f may be used, provided the plate supply impedance is increased to prevent exceeding the maximum peak-plate-current rating.

→ Indicates a change.

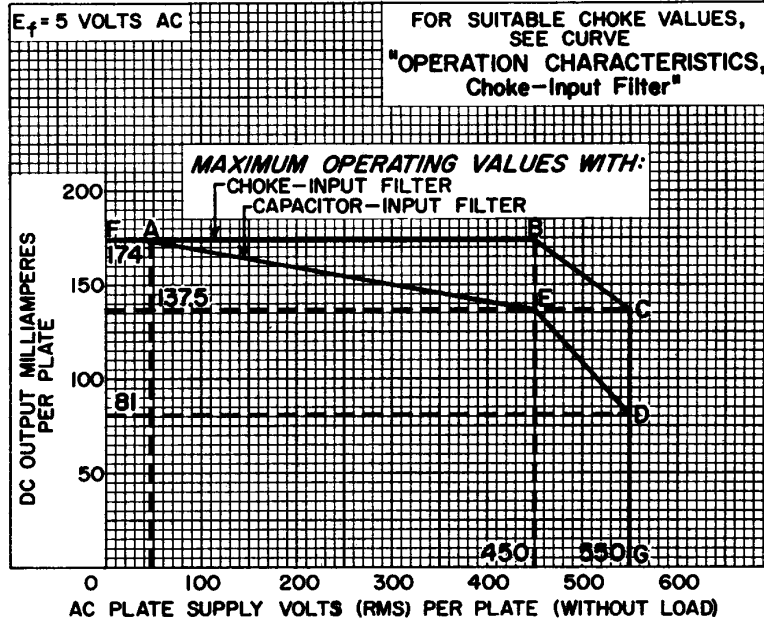


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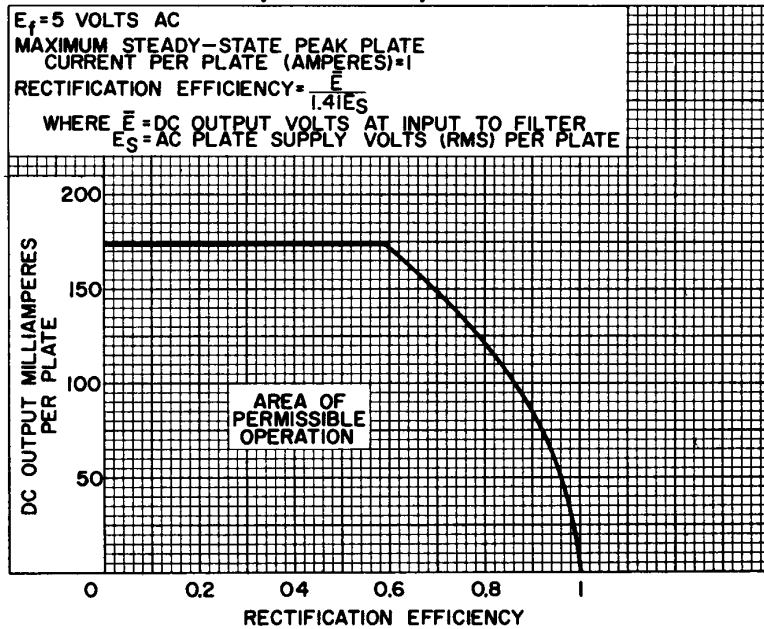


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## RATING CHART I

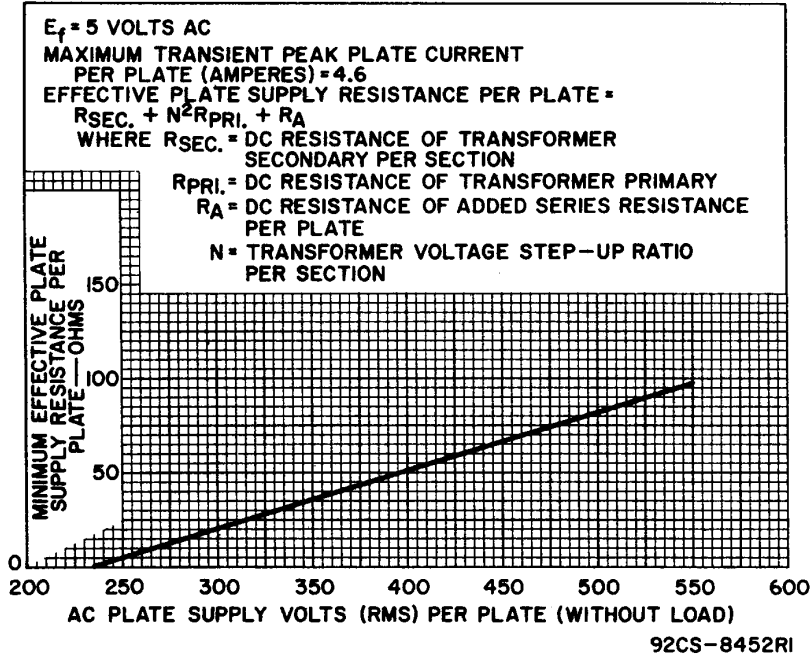


## RATING CHART II Capacitor-Input Filter



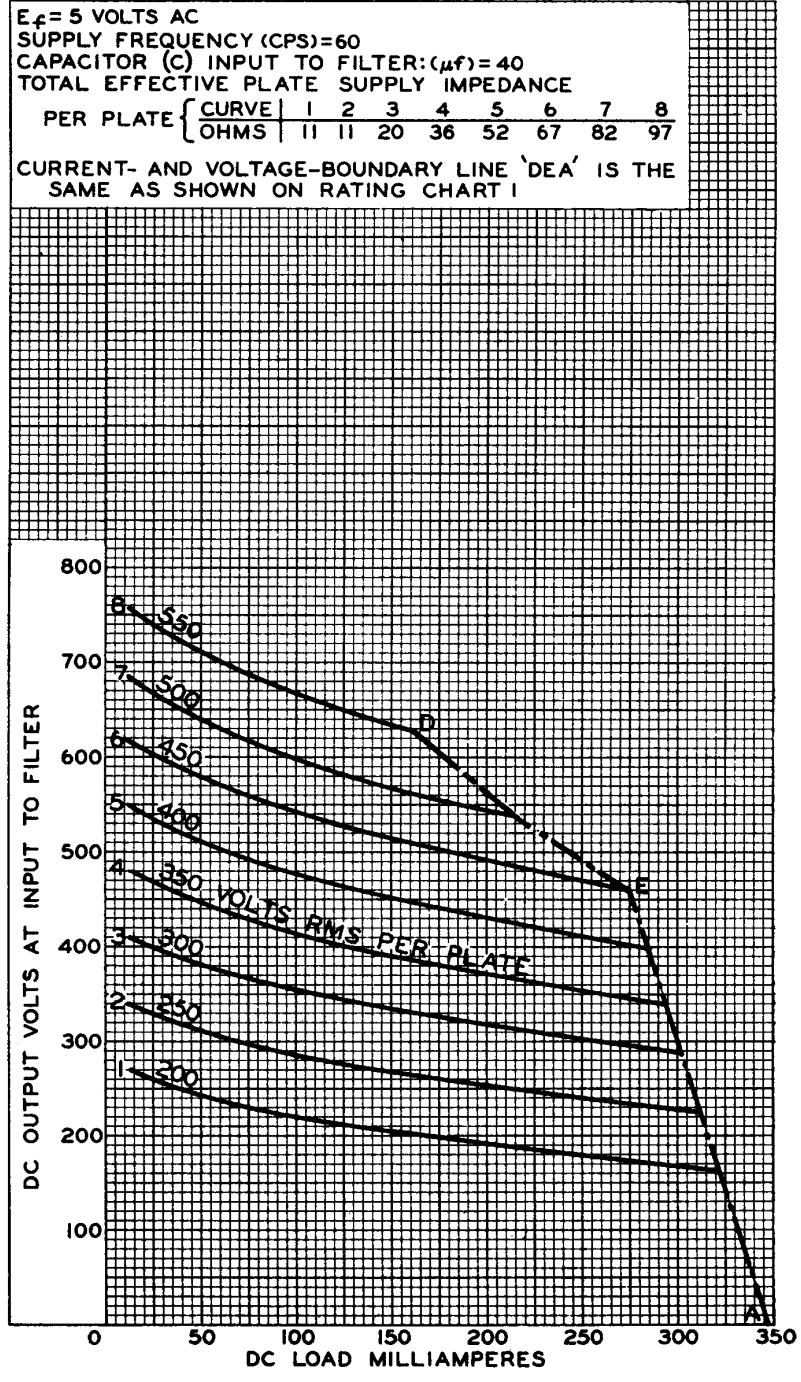
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## RATING CHART III Capacitor-Input Filter



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## OPERATION CHARACTERISTICS Full-Wave Circuit, Capacitor-Input Filter



92CM-8446RI

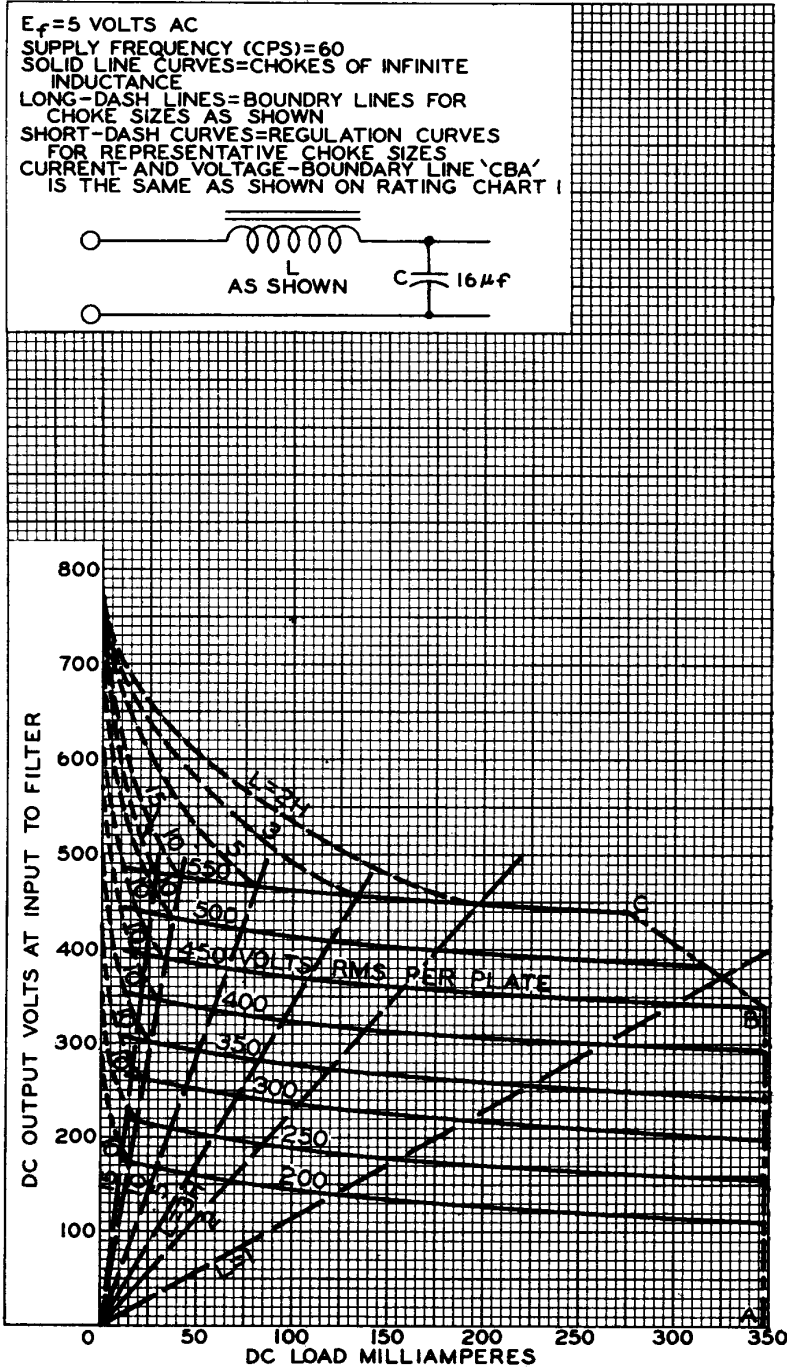


RADIO CORPORATION OF AMERICA  
Electron Tube Division  
Harrison, N. J.

DATA 3  
7-61

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## OPERATION CHARACTERISTICS Full-Wave Circuit, Choke-Input Filter



92CM-8447RI

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