



5V4-GA

FULL-WAVE VACUUM RECTIFIER

For use in full-wave power supplies having high dc requirements

5V4-GA

GENERAL DATA

Electrical:

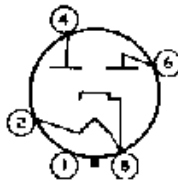
Heater, for Unipotential Cathode:

Voltage b ac or dc volts
Current 2 amp

Mechanical:

Operating Position Any
Maximum Overall Length 3-1/8"
Maximum Seated Length 3-5/16"
Maximum Diameter 1-9/16"
Bulb T12
Base Medium-Shell Octal 5-Pin (JEDEC No. B5-15), or
Short Medium-Shell Octal 5-Pin
with External Barriers, Style B,
Arrangement 1 (JEFC No. B5-121)
Basing Designation for BOTTOM VIEW 5L

Pin 1 - No Connection
Pin 2 - Heater
Pin 4 - Plate of Unit No. 2



Pin 6 - Plate of Unit No. 1
Pin 8 - Heater, Cathode

FULL-WAVE RECTIFIER

Maximum Ratings, Design-Center Values:

PEAK INVERSE PLATE VOLTAGE 1400 max. volts
AC PLATE-SUPPLY VOLTAGE PER PLATE (RMS):
With capacitor-input filter 375 max. volts
With choke-input filter 500 max. volts
PEAK PLATE CURRENT PER PLATE 525 max. ma
DC OUTPUT CURRENT 175 max. ma

HOT-SWITCHING TRANSIENT PLATE CURRENT PER PLATE:

Even occasional hot-switching with capacitor-input circuits permits the flow of plate current having magnitudes which can adversely affect the life and reliability of tubes. If capacitor-input circuits are to be used, protect the circuits against the possibility of hot-switching and do not exceed a maximum peak current value per plate of 3.5 amperes during the initial cycles of the hot-switching transient. If hot-switching is required in operation, the use of choke-input circuits is recommended. Such circuits limit the hot-switching current to a value no higher than that of the peak plate current.

5V4-GA



5V4-GA

FULL-WAVE VACUUM RECTIFIER

Typical Operation:

With capacitor input to filter

AC Plate-to-Plate Supply Voltage (RMS) . .	750	volts
Filter-Input Capacitor*	10	μ f
Total Effective Plate-Supply Impedance		
Per Plate	100	ohms
DC Output Voltage at Input to Filter (Approx.) for dc output current of 175 ma.	410	volts

With choke input to filter

AC Plate-to-Plate Supply Voltage (RMS) . .	1000	volts
Filter-Input Choke	4	henries
DC Output Voltage at Input to Filter (Approx.) for dc output current of 175 ma.	410	volts

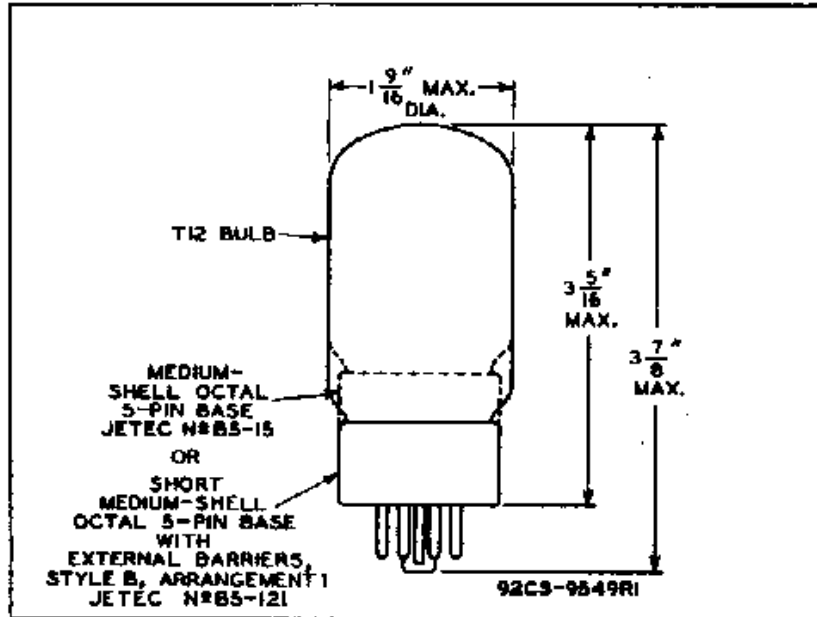
* Higher values of capacitance than indicated may be used, but the effective plate-supply impedance should be increased to prevent exceeding the maximum rating for peak plate current.



5V4-GA

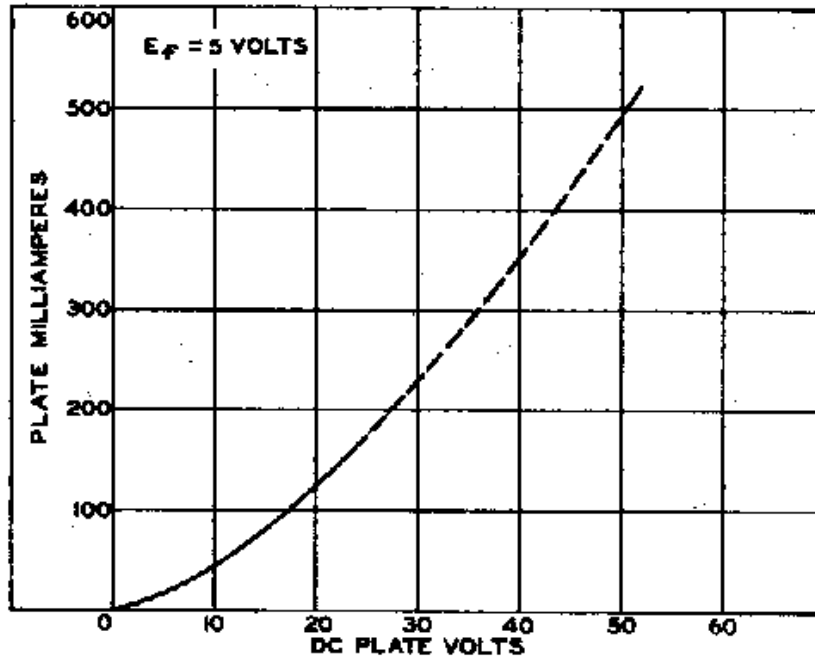
FULL-WAVE VACUUM RECTIFIER

5V4-GA



CE-9549R1

AVERAGE PLATE CHARACTERISTIC
EACH UNIT



ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

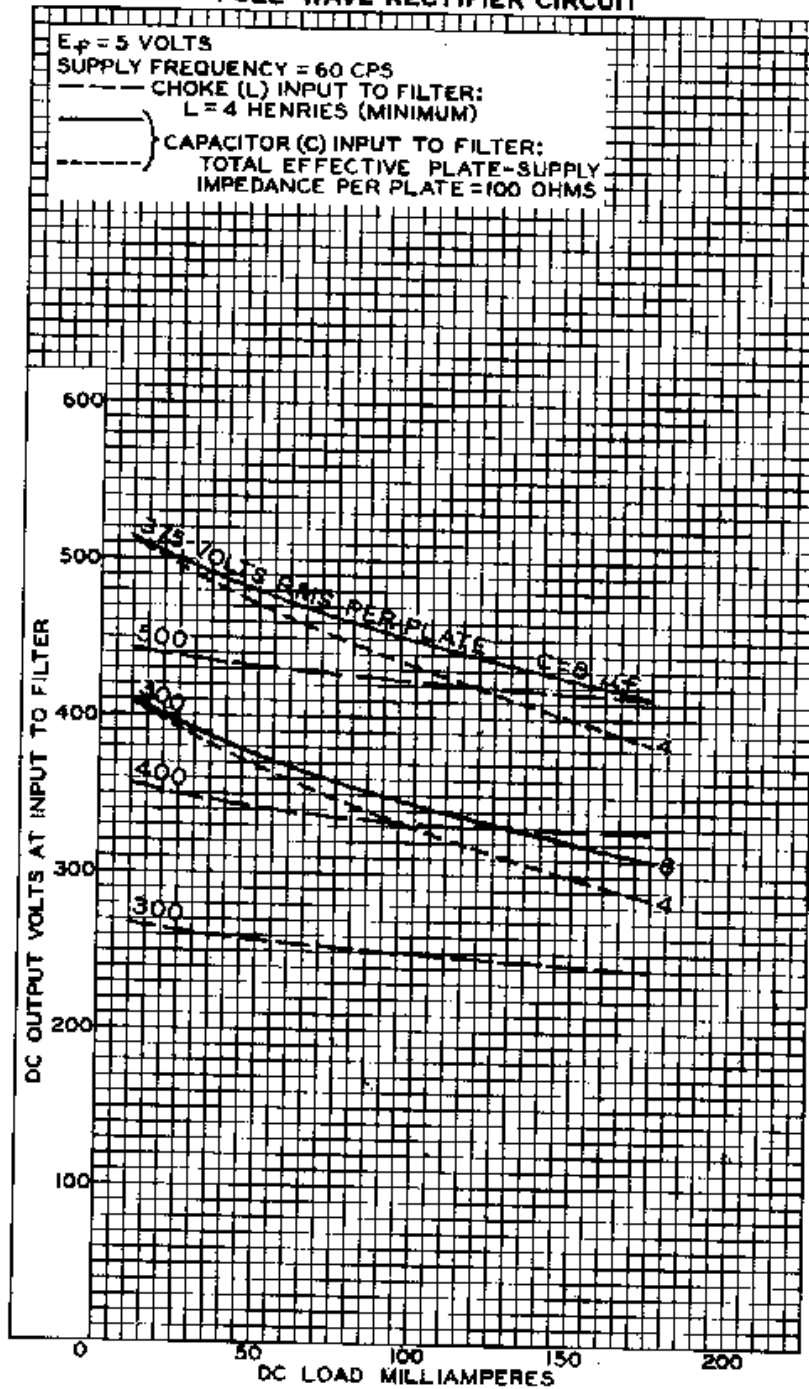
92CS-610R1

5V4-GA



5V4-GA

OPERATION CHARACTERISTICS FULL-WAVE RECTIFIER CIRCUIT



ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6090R2