

Full-Wave Vacuum Rectifier

GENERAL DATA

Electrical:

Filament, Coated:

Voltage (AC or DC) 5 volts

Current 2 amp

Mechanical:

Operating Position. Vertical, base down or up, or ←
Horizontal with pins 2 and 4 in vertical plane

Maximum Overall Length. 3-3/8"

Maximum Seated Length 2-13/16"

Maximum Diameter. 1-9/32" ←

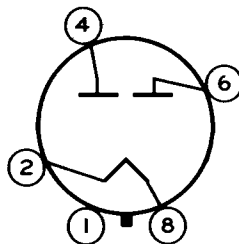
Dimensional Outline See *General Section*

Bulb. T9

Base. Intermediate-Shell Octal 5-Pin, ←
Arrangement 1 (JEDEC Group 1, No.B5-10), or
Short Intermediate-Shell Octal 5-Pin
with External Barriers, Arrangement 1
(JEDEC Group 1, No.B5-62)

Basing Designation for BOTTOM VIEW. 5T

Pin 1—No Connec-
tion
Pin 2—Filament



Pin 4—Plate No.2
Pin 6—Plate No.1
Pin 8—Filament

FULL-WAVE RECTIFIER

Maximum Ratings, Design-Center Values:

For power-supply frequencies of 25 to 1000 cps

PEAK INVERSE PLATE VOLTAGE. 1400 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*) 440 max. ma

TRANSIENT PEAK PLATE CURRENT

PER PLATE (See *Rating Chart III*). 2.5 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)

700

1000

volts

Filter-Input Capacitor^a .

20

—

μf

← Indicates a change.



5Y3GT

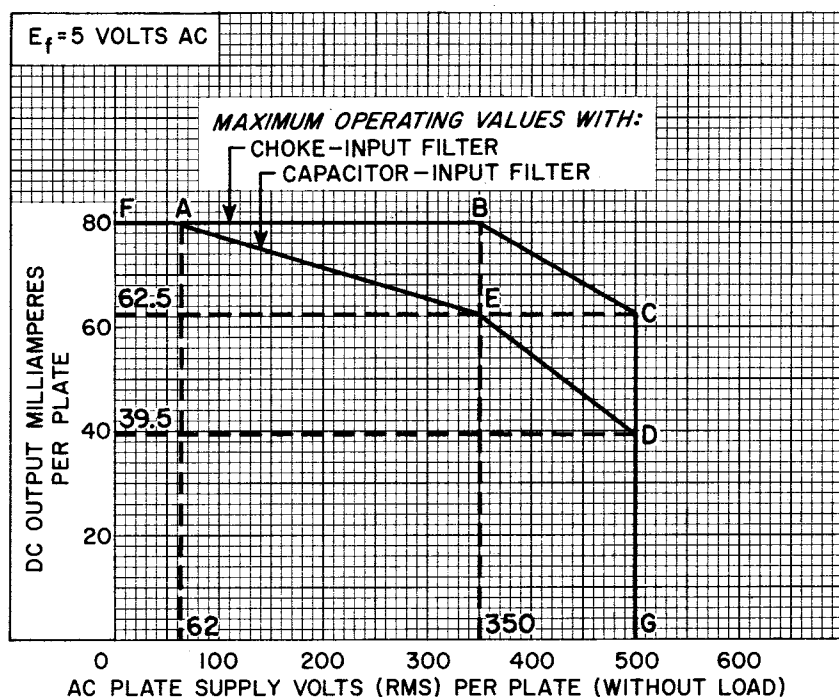
Filter-Input Choke	—	10	henrys
Total Effective Plate Supply Impedance			
Per Plate	50	—	ohms
DC Output Voltage at input to filter	360	380	volts
DC Output Current	125	125	ma

→ Characteristics, Instantaneous Test Condition:

Tube-Voltage Drop for plate ma. = 125
(Per plate) 50 volts

^a Values of capacitance greater than 20 μ f may be used, provided the plate supply impedance is increased to prevent exceeding the maximum peak-plate-current rating.

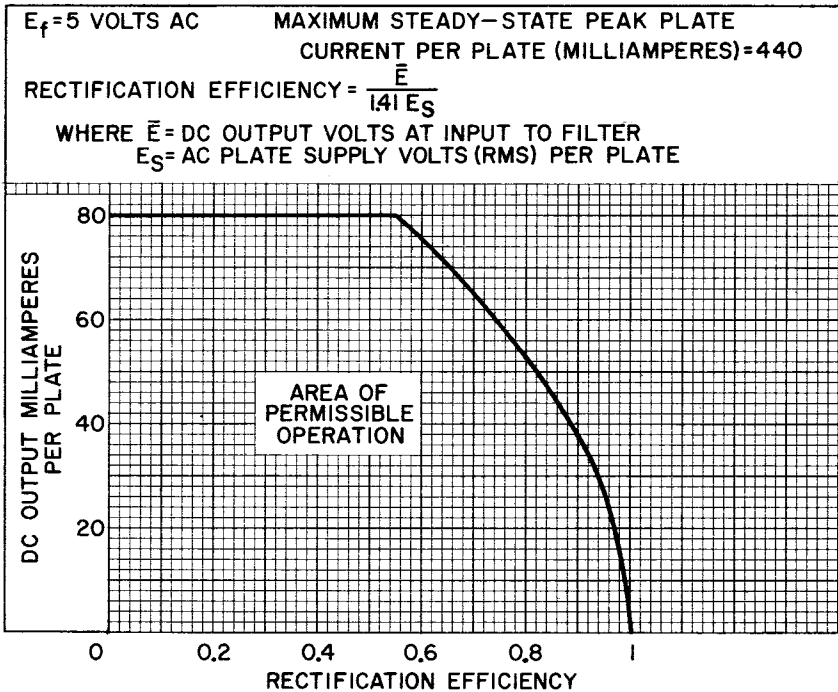
RATING CHART I



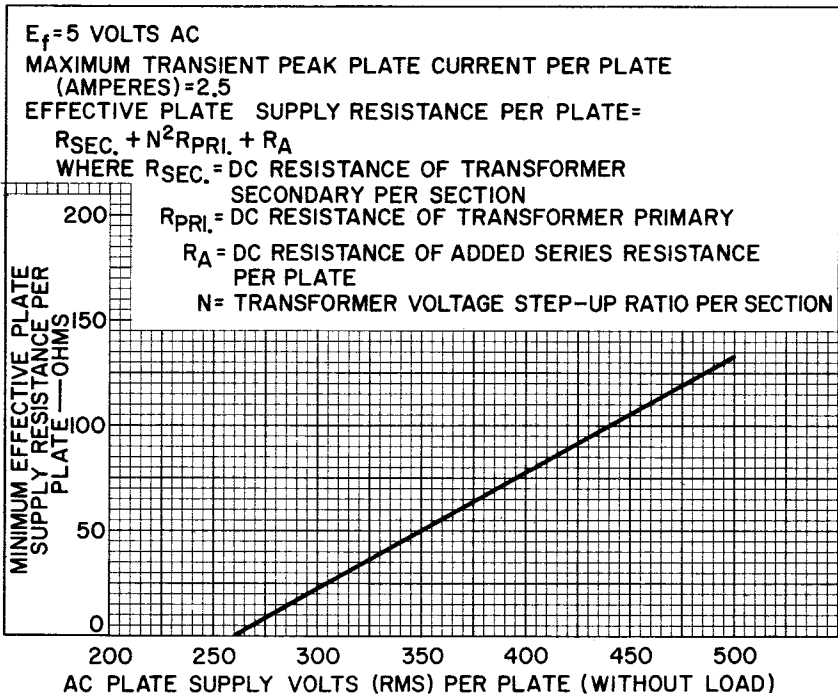
92CS-7396R1

→ Indicates a change.

RATING CHART II Capacitor-Input Filter



RATING CHART III Capacitor-Input Filter

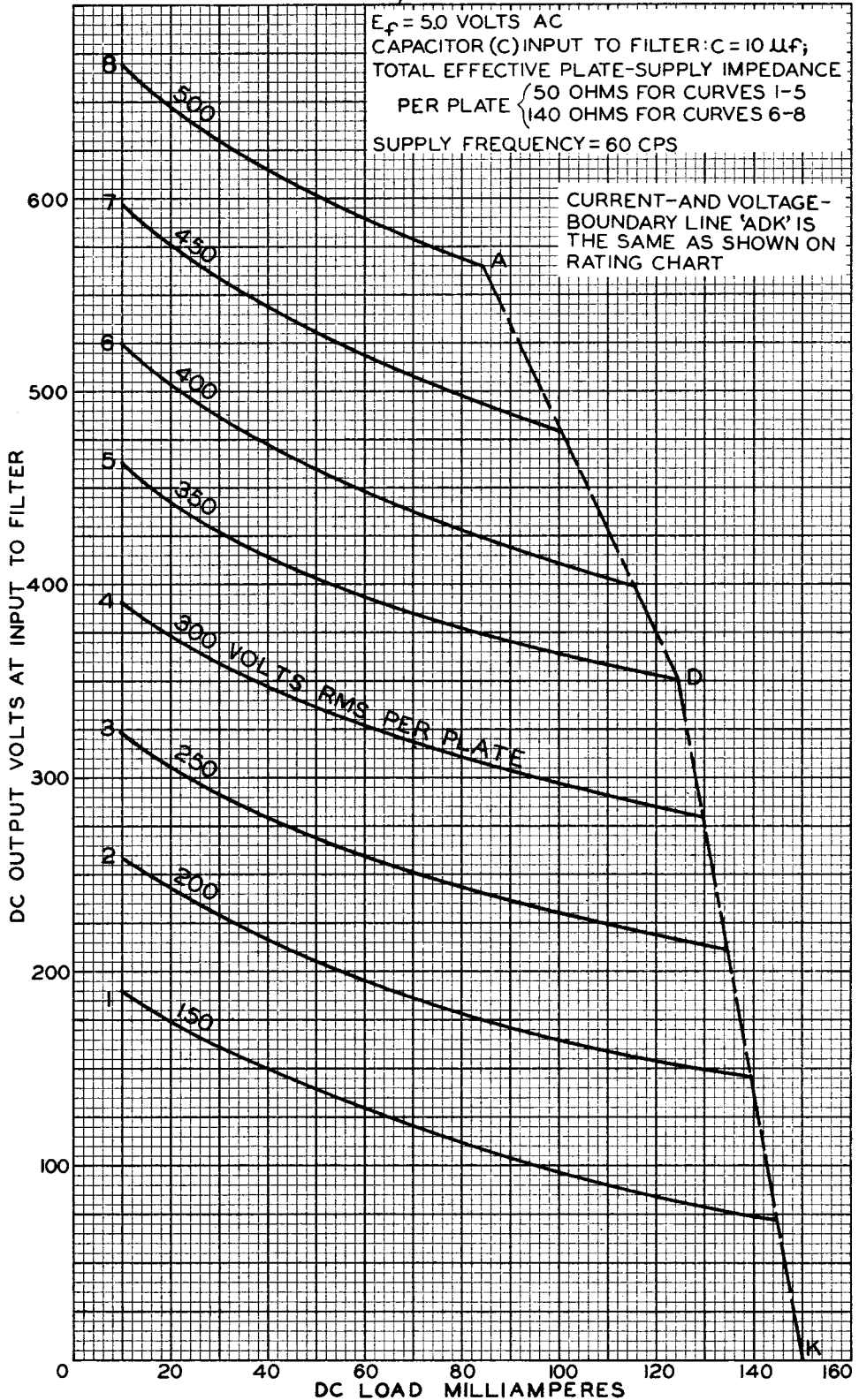




5Y3-GT

5Y3-GT

OPERATION CHARACTERISTICS FULL-WAVE CIRCUIT, CAPACITOR INPUT TO FILTER



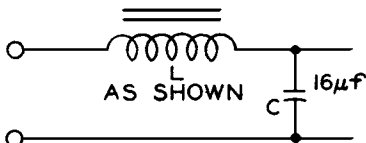
5Y3-GT



5Y3-GT

OPERATION CHARACTERISTICS FULL-WAVE CIRCUIT, CHOKE INPUT TO FILTER

$E_f = 5.0$ VOLTS AC, SUPPLY FREQUENCY = 60 CPS
SOLID-LINE CURVES = CHOKES OF INFINITE INDUCTANCE
LONG-DASH LINES = BOUNDARY LINES FOR CHOKE SIZES AS SHOWN
SMALL-DASH CURVES = REGULATION CURVES FOR REPRESENTATIVE CHOKE SIZES
CURRENT-AND-VOLTAGE BOUNDARY LINE 'CEK' IS THE SAME AS SHOWN ON RATING CHART



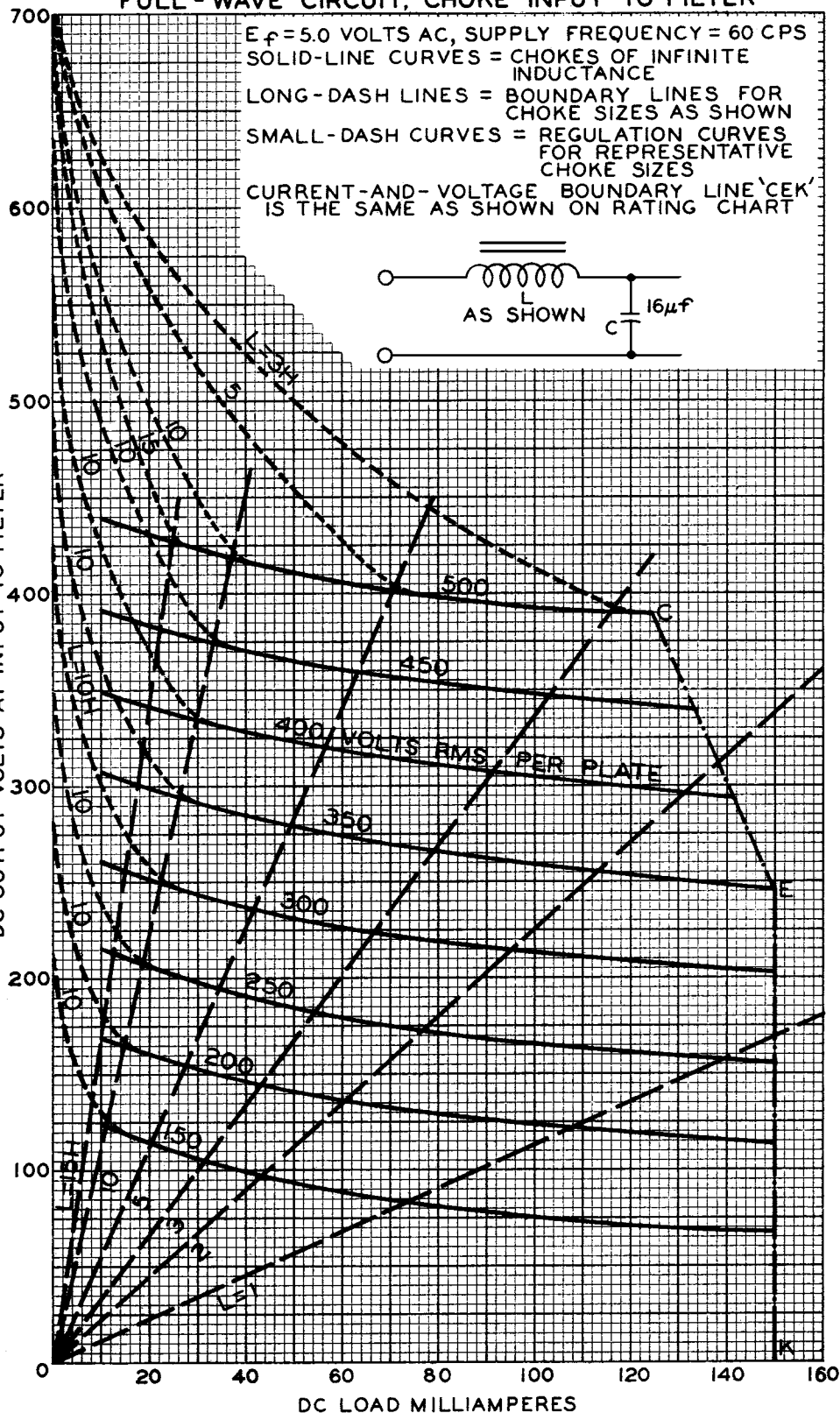
DC OUTPUT VOLTS AT INPUT TO FILTER

DC LOAD MILLIAMPERES

OCT. 28, 1949

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

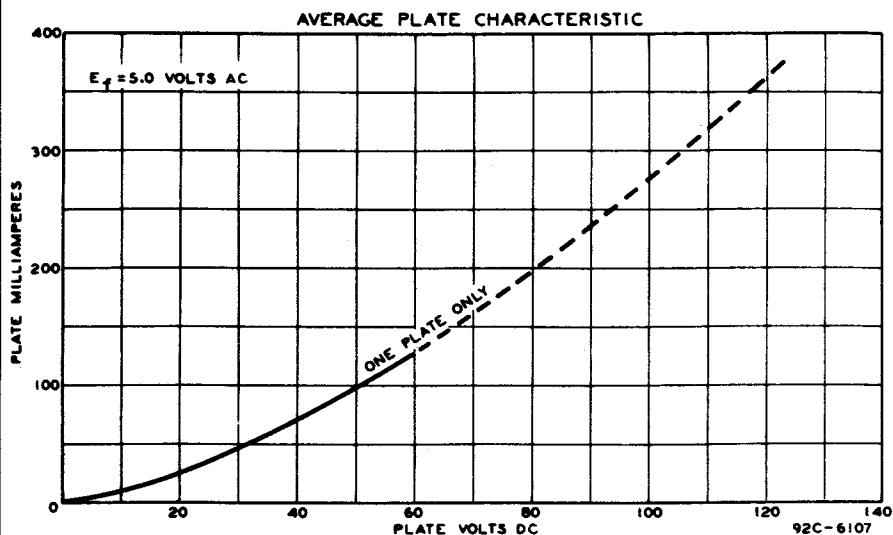
92CM-7394



5Y3-G
5Y3-GT



5Y3-G, 5Y3-GT FULL-WAVE VACUUM RECTIFIER



JAN. 1, 1951

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DATA