RADIO MANUFACTURERS ASSOCIATION

SUITE 701-4 AMERICAN BUILDING
1317 F STREET, N. W.
WASHINGTON, D. C.

SUB-COMMITTEE ON TUBE NUMBERING

E. W. WILBY, CHAIRMAN
711 FIFTH AVENUE
NEW YORK, N. Y.

July 27th, 1936.

To Tube Engineers:

RMA Tube Standardization
Release #83 re 5U4G.

The attached data will provide you with information on the characteristics and ratings of the tube type 5U4G, a full-wave high vacuum 5.0 volt 3.0 ampere heater type rectifier.

As the characteristics of this tube are identical with the now standard tube type 5X4G, it is believed that the forwarding of samples will not be necessary.

The attached data sheet is furnished you through the courtesy of the Hygrade-Sylvania Corporation.

Very truly yours,

Edward W. Wilby

Chairman
Tube Numbering

ewwjlg

TYPE 5U4G

FULL WAVE HIGH VACUUM RECTIFIER

CHARACTERISTICS

Heater Voltage AC	5.0	Volts
Heater Current	3.0	Amperes
Maximum Over-all Length	5-11/32"	
Maximum Diameter	2-1/16"	
Bulb	ST-16	
Base	Medium Octal	

Basing Connection:

Pin 1 - No Connection	Pin 5 - No Connection
Pin 2 - Filament	Pin 6 - Plate
Pin 3 - No Connection	Pin 7 - No Connection
Pin 4 - Plate	Pin 8 - Filament

OPERATING CONDITIONS AND CHARACTERISTICS

Heater Voltage AC	5.0	Volts
A-C Voltage per Plate (RMS)	500	Volts Max.
D-C Output Current	250	Ma. Max.

NOTE: These characteristics are identical with Type 5X4G.

7-25-36

JOINT ELECTRON TUBE ENGINEERING COUNCIL

650 SALMON TOWER
11 WEST FORTY-SECOND STREET
NEW YORK 36, N.Y.
TELEPHONE: LONGACRE 5-3450

Announcement
of
Electron Device Type Reregistration

Release No. 83A (Tentative)*

September 6, 1955

The Joint Electron Tube Engineering Council announced the registration of the following JETEC tube type designation

5U4G

on July 27, 1936, in Release No. 83, under the sponsorship of Sylvania Electric Products, Inc., Emporium, Pennsylvania.

The attached material has been prepared by JTC-5, Committee on Receiving Tubes, in accordance with accepted procedures of the Joint Electron Tube Engineering Council. Upon expiration of the thirty day approval period, this data will supersede all previously registered specifications.

*Unless valid objection to this reregistration is lodged with the RETMA Engineering Office prior to October 6, 1955, this reregistration will be made and this information will be considered "FINAL" WITHOUT FURTHER NOTICE!

JETEC TYPE 5U4G

DOUBLE DIODE

MECHANICAL DATA

Coated filament
Outline drawing 16-3
Bulb . . . . . ST-16 or T-11 or T-12
Base. . . . . B5-15 medium shell octal 5-pin
or, B5-121 short medium shell octal 5-pin
or, B5-127 flared medium shell octal 5-pin
or, B5-113 short medium shell octal 5-pin
Maximum diameter . . . . . 2-1/16"
Maximum overall length. . . . . 5-5/16"
Maximum seated height . . . . . 4-3/4 "
Pin connections . . . . . Basing 5-T

Pin 1 - No connection
Pin 2 - Filament
Pin 4 - #2 Plate
Pin 6 - #1 Plate
Pin 8 - Filament

Mounting position . . . . . vertical *

*Horizontal operation is permitted if pins 1 and 4 are in a vertical plane.

ELECTRICAL DATA

Ratings**

Filament voltage (ac or dc).	5.0	volts
Maximum peak inverse plate voltage	1550	volts
Maximum AC plate supply voltage each plate (r.m.s.).	See Chart I	
Maximum DC output current each plate	See Chart I	
Maximum steady-state peak plate current each plate (See Chart II). .	800	μa
Maximum transient peak plate current each plate. . (See Chart III) .	4.0	amperes
Tube voltage drop (measured with conducting 225 ma each plate. . . .	44	volts

** All values are based on the design center system.

Typical Operation (full wave rectifier)

	Input to Filter			
	Capacitor		Choke	
Filament voltage	5.0	5.0	5.0	volts
Filament current	3.0	3.0	3.0	amperes
AC plate supply voltage each plate (r.m.s.). . . .	450	300	550	volts
Input capacitor.	40	40	---	μf
Input Choke.	---	---	10	henrys
Effective plate supply resistance each plate . . .	85	35	---	ohms
DC output current.	225	245	225	ma
DC output voltage at filter input.	470	290	440	volts

NOTE: AC Plate supply voltage is measured without load.

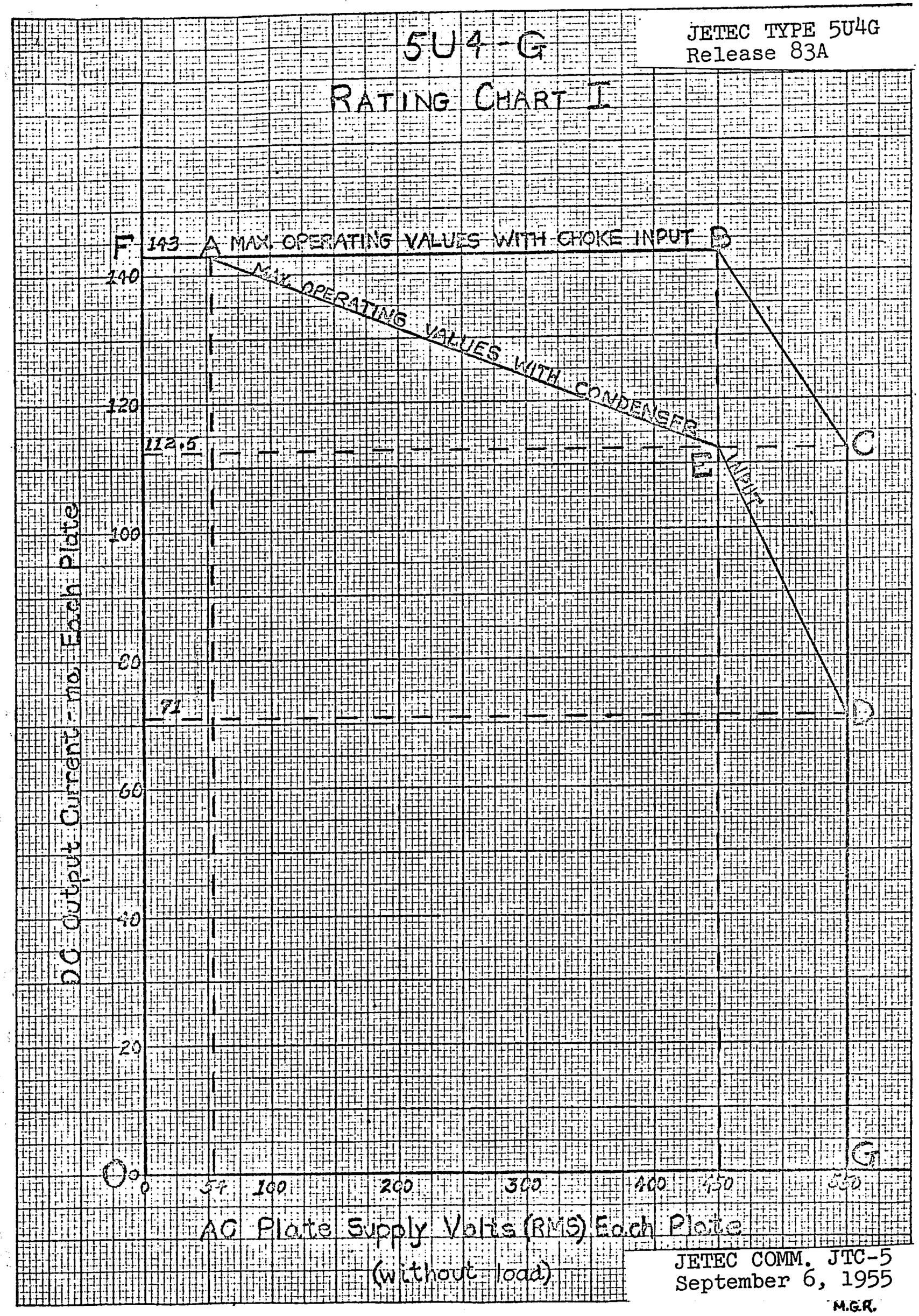
Refer to "Interpretation of Receiving Tube Ratings"

JETEC COMM. JTC-5
September 6, 1955

5U4-G

JETEC TYPE 5U4G
Release 83A

RATING CHART I



JETEC COMM. JTC-5
September 6, 1955

M.G.R.

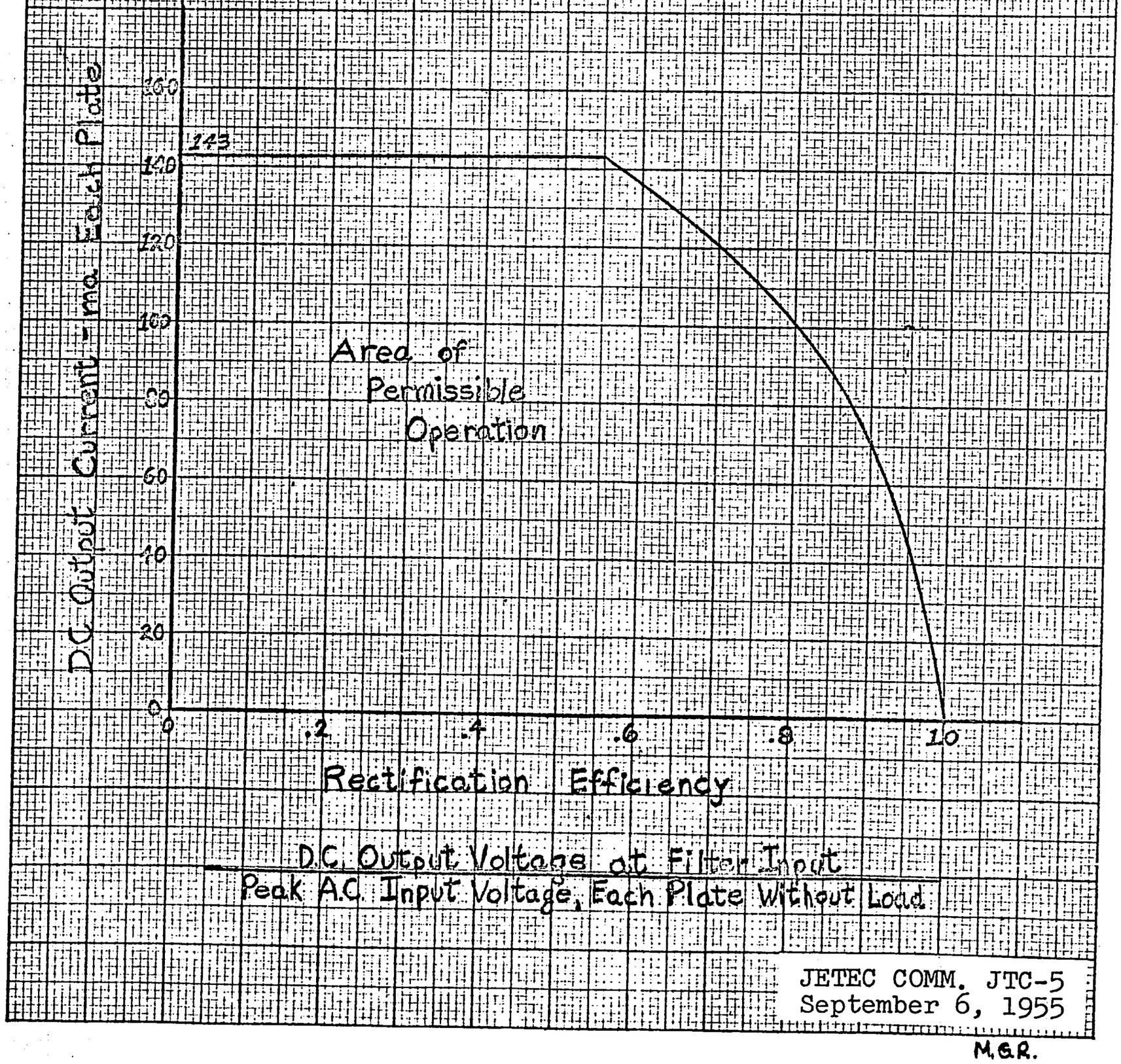
5U4-G

RATING CHART II

CAPACITOR INPUT

JETEC TYPE 5U4G
Release 83A

Based on $\hat{I}_p$ = 800 ma Each Plate



JETEC COMM. JTC-5
September 6, 1955

M.G.R.

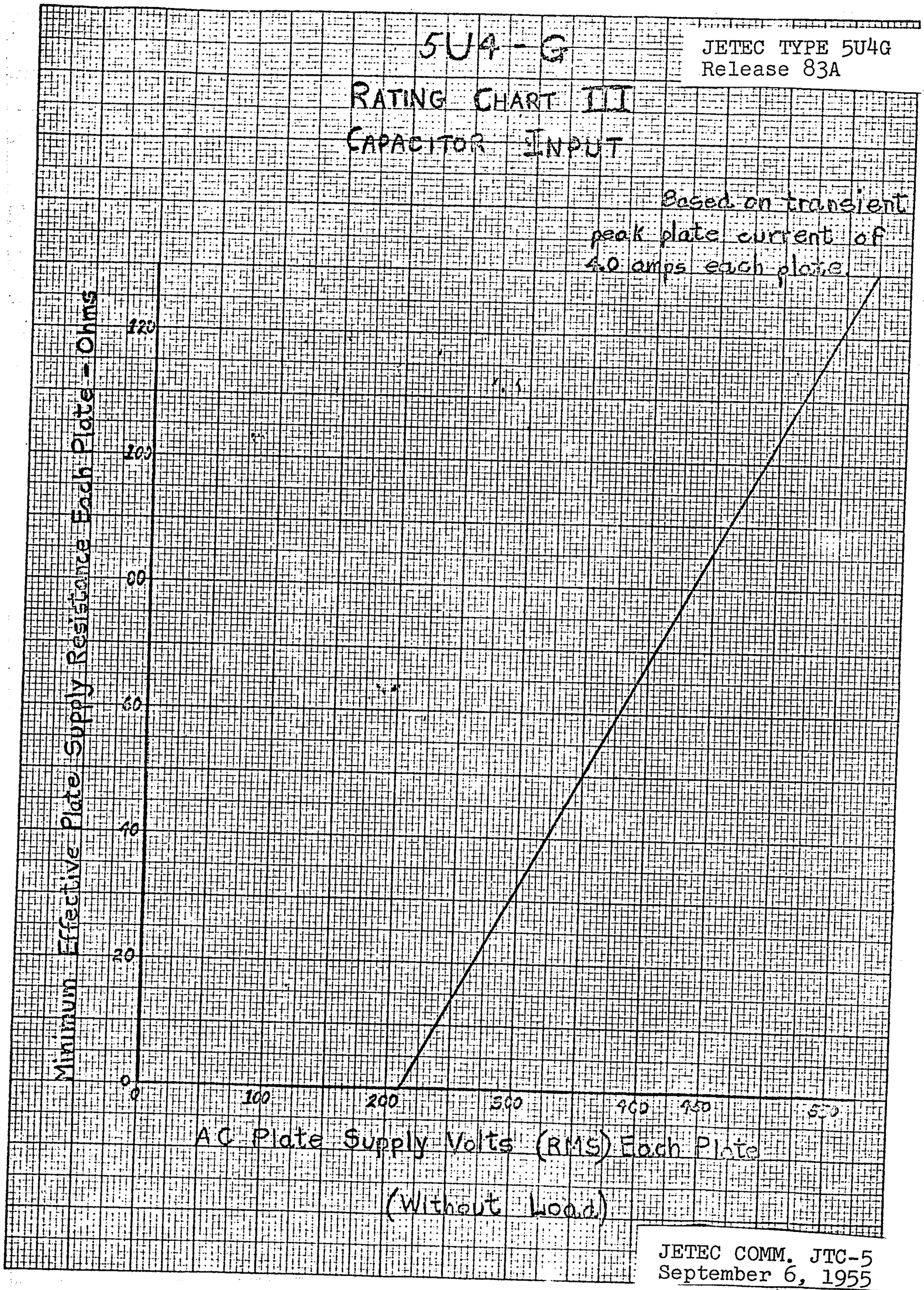
5U4-G

RATING CHART III

CAPACITOR INPUT

JETEC TYPE 5U4G
Release 83A

Based on transient peak plate current of 4.0 amps each plate



JETEC COMM. JTC-5
September 6, 1955
M.G.R.

JOINT ELECTRON TUBE ENGINEERING COUNCIL

650 SALMON TOWER
11 WEST FORTY-SECOND STREET
NEW YORK 36, N.Y.
TELEPHONE: LONGACRE 5-3450

CORRECTION

Release No. 83A (Tentative)

September 26, 1955

The Joint Electron Tube Engineering Council announced the reregistration of the following tube type designation

5U4G

on September 6, 1955, in Release No. 83A, under the sponsorship of JTC-5, Committee on Receiving Tubes.

In the "Ratings" section directly under item "ELECTRICAL DATA" the value of max. steady-state peak plate current each plate is shown as 800 microamperes; actually the symbol ma. should be shown to indicate milliamperes which same value will then coincide with the conditions shown at the top of Rating Chart II.