# RADIO MANUFACTURERS ASSOCIATION

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

R.M.A. DATA BUREAU
90 West Street
New York, N. Y.

Registration No. 277

Date June 2, 1941

To
Tube Engineers:

Registration has been made by the RMA Data Bureau of the vacuum tube type

5Y3-GT/5Y3G
12SL7-GT

as defined by the characteristics and ratings given in the attached data on application of

RCA Manufacturing Company, Inc.
Harrison, New Jersey

Respectfully yours,

RMA DATA BUREAU

By

# RMA Release # 277

5Y3-GT/5Y3-G

## FULL-WAVE HIGH-VACUUM RECTIFIER

(TENTATIVE DATA)

*Ratings are to be interpreted according to RMA Standard M8-210 (Jan. 8, 1940 Rev. 11-40)*

| | |
|---|---|
| FILAMENT VOLTAGE (A.C.) | 5 Volts |
| FILAMENT CURRENT | 2 Amperes |
| MAXIMUM OVERALL LENGTH | 3-3/8" |
| MAXIMUM SEATED HEIGHT | 2-13/16" |
| MAXIMUM DIAMETER | 1-5/16" |
| BULB | T-9 |
| BASE | Intermediate Shell Octal 5-Pin |
| MOUNTING POSITION | Vertical * |

### Full-Wave Rectifier

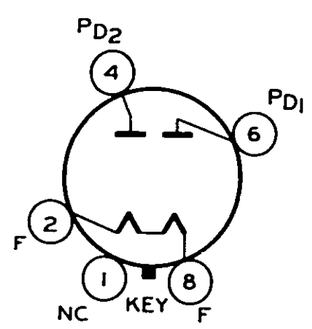
| | |
|---|---|
| PEAK INVERSE VOLTAGE | 1400 Volts |
| PEAK PLATE CURRENT PER PLATE | 375 Milliamperes |
| *With Condenser-Input Filter:* | |
| A-C Plate Voltage per Plate (RMS) | 350 max. Volts |
| Total Effective Plate-Supply Impedance per Plate▲ | 50 min. Ohms |
| D-C Output Current | 125 max. Milliamperes |
| *With Choke-Input Filter:* | |
| A-C Plate Voltage per Plate (RMS) | 500 max. Volts |
| Input-Choke Inductance | 5 min. Henries |
| D-C Output Current | 125 max. Milliamperes |

* Horizontal operation permitted if pins 2 and 8 are in a horizontal plane.

▲ When a filter-input condenser larger than 40 μf is used, it may be necessary to use more plate-supply impedance than the minimum value shown to limit the peak current to the rated value.

### Bottom View of Socket Connections

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




G-5T



Photolithographed in U.S.A.

# RMA Release # 277

12SL7-GT

## TWIN-TRIODE AMPLIFIER

(TENTATIVE DATA)

*Ratings are to be interpreted according to RMA Standard M8-210 (Jan. 8, 1940 Rev. 11-40)*

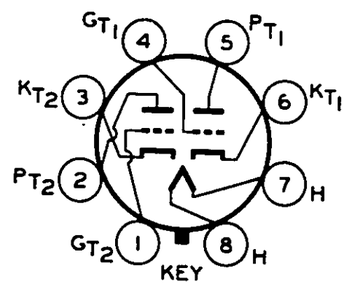
| | |
|---|---|
| HEATER VOLTAGE (A.C. or D.C.) | 12.6 Volts |
| HEATER CURRENT | 0.15 Ampere |
| MAXIMUM OVERALL LENGTH | 3-5/16" |
| MAXIMUM SEATED HEIGHT | 2-3/4" |
| MAXIMUM DIAMETER | 1-5/16" |
| BULB | T-9 |
| BASE | Intermediate Shell Octal 8-Pin |
| MOUNTING POSITION | Any |

### Amplifier - Each Unit

| | | |
|---|---|---|
| PLATE VOLTAGE | 250 max. | Volts |
| GRID VOLTAGE | 0 min. | Volts |
| PLATE DISSIPATION | 1 max. | Watt |
| *CHARACTERISTICS - Class $A_1$ Amplifier:* | | |
| Plate Voltage | 250 | Volts |
| Grid Voltage | -2 | Volts |
| Amplification Factor | 70 | |
| Plate Resistance (Approx.) | 44000 | Ohms |
| Transconductance | 1600 | Micromhos |
| Plate Current | 2.3 | Milliamperes |

### Bottom View of Socket Connections

Pin 1 - Grid (Triode 2)
Pin 2 - Plate (Triode 2)
Pin 3 - Cathode (Triode 2)
Pin 4 - Grid (Triode 1)
Pin 5 - Plate (Triode 1)
Pin 6 - Cathode (Triode 1)
Pin 7 - Heater
Pin 8 - Heater




8BD



Photolithographed in U.S.A.

# 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. 277A (Tentative)*

January 16, 1956

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

5Y3GT

on June 2, 1941, in Release No. 272, under the sponsorship of the Radio Corp. of America, Harrison, New Jersey.

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 supercede all previously registered specifications.

*Unless valid objection to this reregistration is lodged with the RETMA Engineering Office prior to February 16, 1956, this reregistration will be made and this information will be considered "FINAL" WITHOUT FURTHER NOTICE!

JETEC DATA
JOINT ELECTRON TUBE ENGINEERING COUNCIL
COMMITTEE ON RECEIVING TUBES

JETEC Type 5Y3GT
Release 27A

# JETEC TYPE 5Y3GT

## DOUBLE DIODE

## MECHANICAL DATA

Coated filament
Outline drawing. . . . . 9-13 or 9-42 Bulb. . . . . T-9
Base . . . . . B5-10 . . . intermediate shell octal 5-pin
or. . . . . B5-62 short intermediate shell octal 5-pin
Maximum diameter . . . . . 1-9/32 "
Maximum overall length . . . . . 3-3/8 "
Maximum seated height. . . . . 2-13/16"
Pin connections. . . . . Basing 5T

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

Mounting position. . . . . .Vertical*

*Horizontal operation permitted if pins #2 and #4 are in vertical plane.

## ELECTRICAL DATA

### Ratings**

| | | |
|---|---|---|
| Filament voltage (ac or dc). . . . . | 5.0 | volts |
| Maximum peak inverse voltage . . . . . | 1400 | volts |
| Maximum AC plate supply voltage each plate (rms) . . . . . | See Chart I | |
| Maximum steady-state DC output current each plate. . . . . | See Chart I | |
| Maximum steady-state peak plate current each plate (See Chart II). | 440 | ma |
| Maximum transient peak plate current each plate (See Chart III). . | 2.5 | amperes |
| Tube voltage drop (measured with tube conducting 125 ma each plate) . . . . . | 50 | volts |

**All values based on design center system.

### Typical Operation (full wave rectifier)

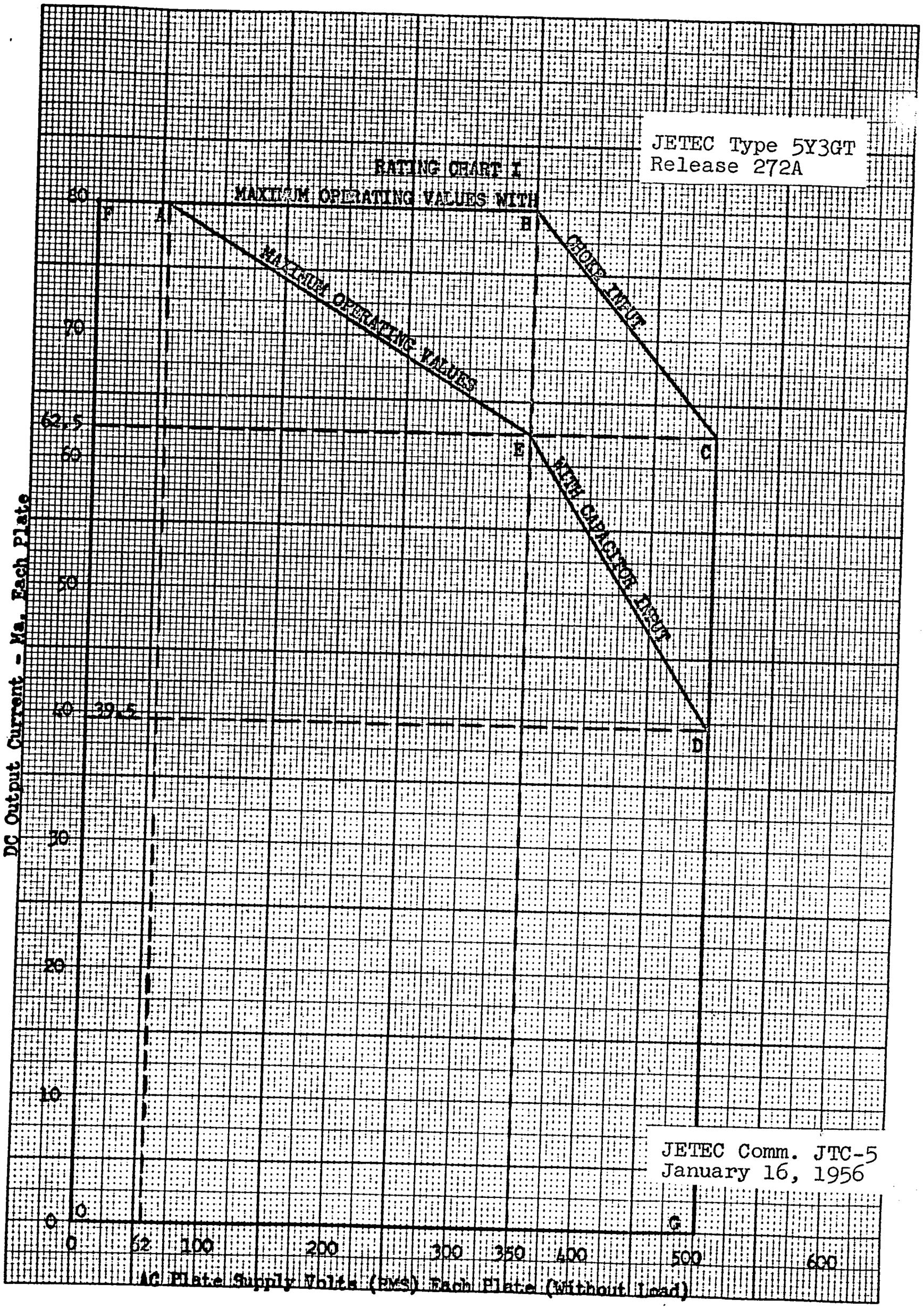
| | Input to Filter Capacitor | Input to Filter Choke | |
|---|---|---|---|
| Filament voltage . . . . . | 5.0 | 5.0 | volts |
| Filament current . . . . . | 2.0 | 2.0 | amperes |
| AC plate supply voltage each plate (rms) . . . . . | 350 | 500 | volts |
| Input capacitor. . . . . | 20 | --- | µf |
| Input choke. . . . . | --- | 10 | henries |
| Effective plate supply resistance each plate . . . . . | 50 | --- | ohms |
| DC output current. . . . . | 125 | 125 | ma |
| DC output voltage at filter input. . . . . | 360 | 380 | volts |

NOTE: AC plate supply voltage is measured without load.

Refer to "Interpretation of Receiving Tube Ratings"

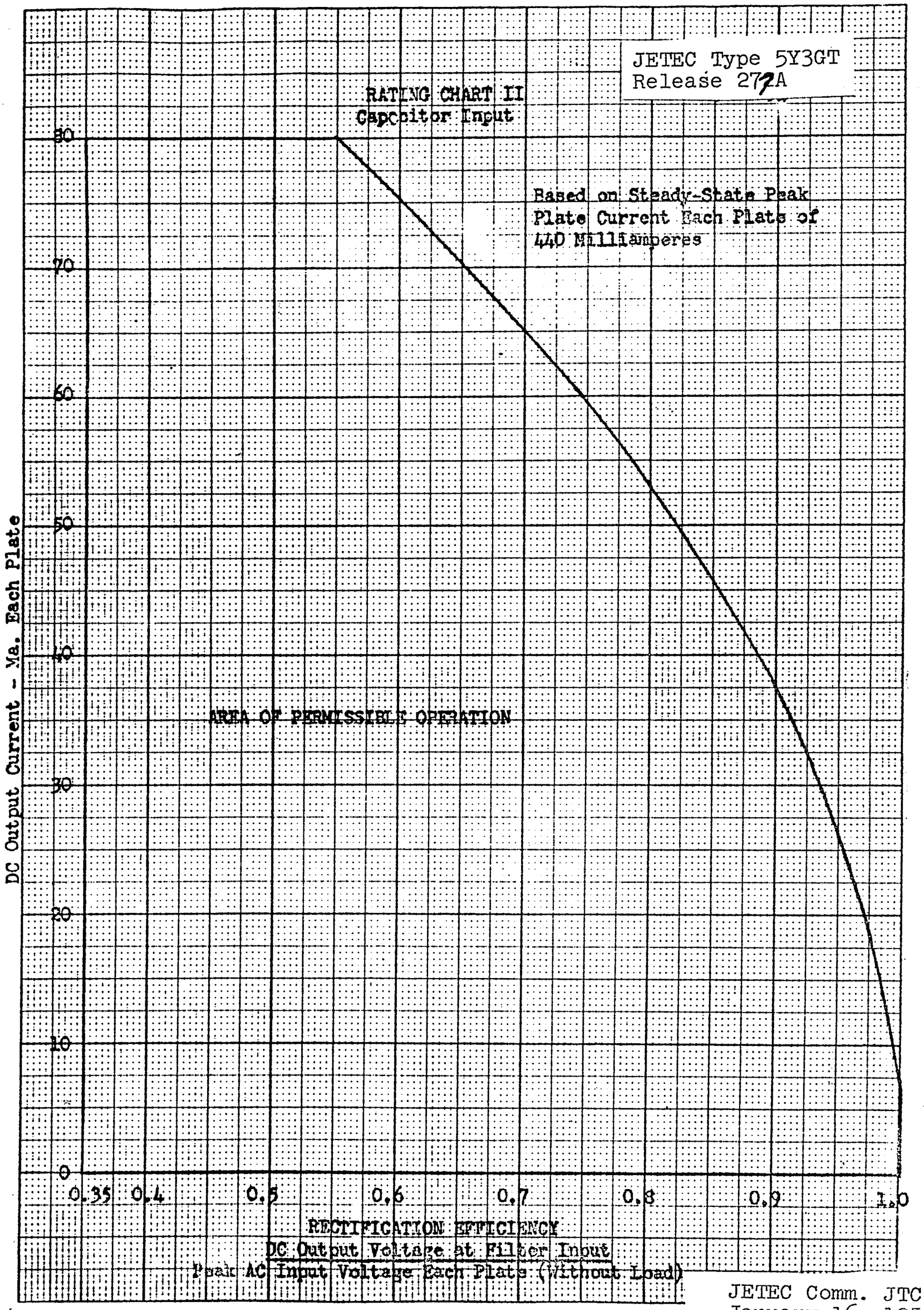
JETEC Comm. JTC-5
January 16, 1956

JETEC Type 5Y3GT
Release 272A

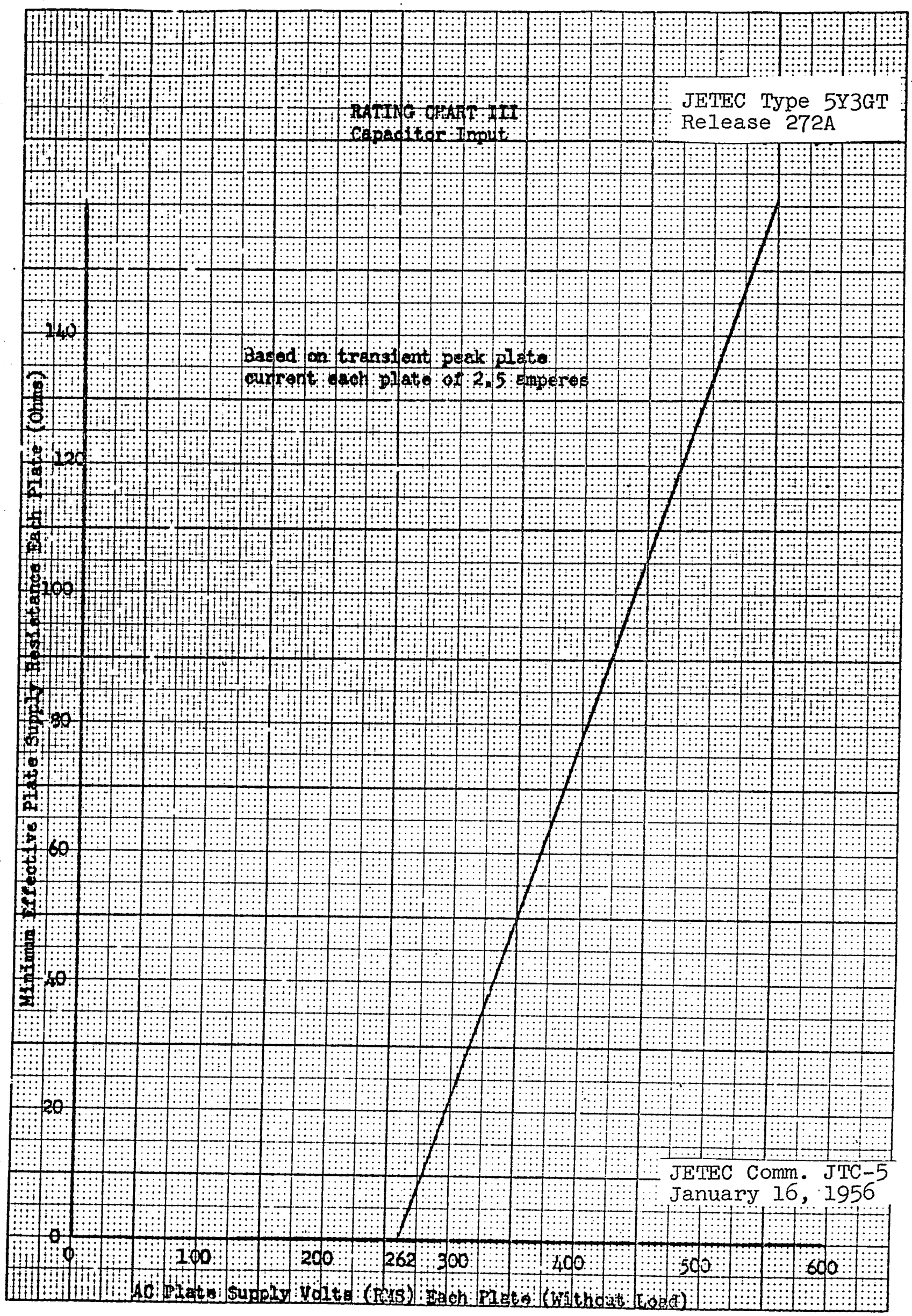



JETEC Comm. JTC-5
January 16, 1956

JETEC Type 5Y3GT
Release 27?A




JETEC Comm. JTC-5
January 16, 1956


RATING CHART III
Capacitor Input
JETEC Type 5Y3GT
Release 272A
Based on transient peak plate current each plate of 2.5 amperes
Minimum Effective Plate Supply Resistance Each Plate (Ohms)
140
120
100
80
60
40
20
0
0
100
200
262
300
400
500
600
AC Plate Supply Volts (RMS) Each Plate (Without Load)
JETEC Comm. JTC-5
January 16, 1956

# JOINT ELECTRON DEVICE ENGINEERING COUNCIL

2260 Salmon Tower
11 West Forty-Second Street
New York 36, N. Y.
Telephone: LOngacre 5-0717

Announcement
of
Electron Device Type Reregistration

Release No. 277B (Tentative)*

May 2, 1960

The Joint Electron Device Engineering Council announced the registration of the following electron device designation

12SL7GT

on June 2, 1941, Release No. 272, under the sponsorship of Radio Corporation of America, Harrison, New Jersey.

The sponsor now proposes reregistration based on the following data:

| ITEM | AS REGISTERED | AS PROPOSED |
|---|---|---|
| Under Amplifier | | |
| Each Unit | | |
| PLATE VOLTAGE | 250 max. | 300 max. volts |
| PEAK HEATER-CATHODE VOLTAGE: | | |
| Heater negative with respect to cathode | none | 90 max. volts |
| Heater positive with respect to cathode | none | 90 max. volts |

*Unless valid objection to this reregistration is lodged with the EIA Standards Laboratory prior to June 2, 1960, this reregistration will be made and this information will be considered "FINAL" WITHOUT FURTHER NOTICE!

# JOINT ELECTRON DEVICE ENGINEERING COUNCILS

JEDEC Electron Tube Council JEDEC Solid State Products Council

2001 Eye Street, NW
Washington, DC 20006

Announcement

of

Electron Device Type Reregistration

Release No. 277C (final)

July 10, 1973

The Joint Electron Device Engineering Council announced the proposed reregistration of the following electron device designation

12SL7GT

on May 29 1973.

This announcement is notice that the proposed reregistration covered by Release No. 277C, dated May 29, 1973, may be considered "FINAL".

# JOINT ELECTRON DEVICE ENGINEERING COUNCILS

JEDEC Electron Tube Council JEDEC Solid State Products Council

2001 Eye Street, NW
Washington, DC 20006

Announcement

of

Electron Device Type Reregistration

Release No. 277C (tentative*)

May 29, 1973

The Joint Electron Device Engineering Council announced the registration of the following electron device designation

12SL7GT

on June 2, 1941, in Release No. 277, under the sponsorship of RCA Corp.

The sponsor now proposes reregistration as follows:

| ITEM | AS REGISTERED | AS PROPOSED |
|---|---|---|
| Base | Intermediate Shell Octal 8-Pin | B8-6, B8-58, or B8-251 |

*Unless valid written objection to this reregistration is lodged with the EIA Type Administration Office at the above address prior to June 29, 1973 this reregistration will be made and this information will be considered "FINAL".

# JOINT ELECTRON DEVICE ENGINEERING COUNCILS

JEDEC Electron Tube Council JEDEC Solid State Products Council

2001 Eye Street, NW
Washington, DC 20006

Announcement

of

Electron Device Type Reregistration

Release No. 277C (tentative*)

May 29, 1973

The Joint Electron Device Engineering Council announced the registration of the following electron device designation

12SL7GT

on June 2, 1941, in Release No. 277, under the sponsorship of RCA Corp.

The sponsor now proposes reregistration as follows:

| ITEM | AS REGISTERED | AS PROPOSED |
|---|---|---|
| Base | Intermediate Shell Octal 8-Pin | B8-6, B8-58, or B8-251 |

*Unless valid written objection to this reregistration is lodged with the EIA Type Administration Office at the above address prior to June 29, 1973 this reregistration will be made and this information will be considered "FINAL".