JOINT ELECTRON DEVICE ENGINEERING COUNCILS

JEDEC Electron Tube Council

JEDEC Semiconductor Device 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. 3030A (Tentative)*

May 8, 1961

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

5V3A

on November 21, 1960, Release No. 3030 under the sponsorship of Tung-Sol Electric Inc., Bloomfield, New Jersey.

The Radio Corporation of America now proposes reregistration based on the attached data sheet.

*Unless valid objection to this reregistration is lodged with the EIA Standards Laboratory prior to June 8, 1961, this reregistration will be made and this information will be considered "FINAL" WITHOUT FURTHER NOTICE!

Release No. 3030A
Type No. 5V3A

ITEM	AS REGISTERED	AS PROPOSED
Under Mechanical Data:		
Base	JEDEC B8-118 or JEDEC B8-110	JEDEC B8-118 or JEDEC B8-110 or JEDEC B5-121
Base Pin Connections	Pin 1 - No Connection Pin 2 - Filament Pin 3 - No Connection Pin 4 - Plate #2 Pin 5 - No Connection Pin 6 - Plate #1 Pin 7 - No Connection Pin 8 - Filament	As registered for B8-118 and B8-110. For B5-121 as follows: Pin 1 - No Connection Pin 2 - Filament Pin 4 - Plate #2 Pin 6 - Plate #1 Pin 8 - Filament

JOINT ELECTRON DEVICE ENGINEERING COUNCIL

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CORRECTION NOTICE

of

Electron Device Type Registration

Release No. 3030

December 5, 1960

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

5V3A

on November 21, 1960.

The following corrections should be made on the data sheet:

Under Rectifier Service the third line should read:

STEADY STATE PEAK PLATE CURRENT (Each Plate)	1.4 amps

Under Typical Operating Conditions and Characteristics lines two, three, and four should read:

FILTER INPUT CAPACITOR	40	40 microf
EFFECTIVE PLATE SUPPLY RESISTANCE (Each Plate)	20	50 ohms
DC OUTPUT CURRENT	380	350 mamps

JOINT ELECTRON DEVICE ENGINEERING COUNCIL

2260 Salmon Tower
11 West Forty-Second Street
New York 36, N. Y.
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Announcement

of

Electron Device Type Registration

Release No. 3030

November 21, 1960

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

5V3A

according to the ratings and characteristics found on the attached data sheet on the application of

Tung-Sol Electric Inc.
Bloomfield, New Jersey

TUNG-SOL ELECTRON TUBE DATA

TYPE 5V3A

TWIN DIODE

FOR FULL-WAVE POWER RECTIFIER APPLICATIONS

The 5V3A is a filamentary full wave, high vacuum rectifier designed for service in the power supply of television receivers or other equipment requiring high currents.

MECHANICAL DATA

Coated Filament		
Outline Drawing	JEDEC 12-16	Bulb T-12
Base	JEDEC B8-118 or JEDEC B8-110	short medium shell octal 8 pin with barrier
Maximum Diameter		1.562 inches
Maximum Overall Length		4.625 inches
Maximum Seated Height		4.062 inches
Base Pin Connections:		JEDEC 5T
Pin 1 - No connection		Pin 5 - No connection
Pin 2 - Filament		Pin 6 - Plate #1
Pin 3 - No connection		Pin 7 - No connection
Pin 4 - Plate #2		Pin 8 - Filament
Mounting Position		Vertical
If pins 2 and 4 are in a vertical plane		Horizontal

ELECTRICAL DATA

Filament Characteristics and Ratings

Filament Voltage[A]	5.0±0.5 volts
Filament Current at 5.0 volts	3.0 amps
Tube Voltage Drop, tube conducting 350 ma each plate	42 volts

November 10, 1960

ELECTRICAL DATA-Cont'd

MAXIMUM RATINGS-Interpreted according to design maximum system[B]

Rectifier Service[C]		
Peak Inverse Plate Voltage	1550	volts
RMS AC Plate Supply Voltage(Each Plate)	550	volts
Steady State Peak Plate Current(Each Plate)	1.4	~~volts~~ Amp
Transient Peak Plate Current(Each Plate)	6.6	amps
DC Output Current(Condenser Input)	415	mamps
with AC Plate Supply Voltage of 470 volts RMS		
Bulb Temperature	240	°C

Typical Operating Conditions and Characteristics

Full Wave Rectifier-Capacitor Input Filter

AC Plate Supply Voltage(Each Plate)RMS[D]	300	425	volts
Filter Input Capacitor	40	40	~~volts~~ μF
Effective Plate Supply Resistance(Each Plate)	20	50	~~volts~~ Ω
DC Output Current	380	350	~~volts~~ mA
DC Output Voltage at Filter Input	300	440	volts

Full Wave Rectifier-Choke Input Filter

AC Plate Supply Voltage(Each Plate)RMS[D]	500	volts
Filter Input Choke	10	henry
DC Output Current	350	mamps
DC Output Voltage at Filter Input	390	volts

A. The equipment designer shall so design the equipment that the filament voltage is centered at the specified bogey value.

B. Design-Maximum Ratings are limiting values of operating and environmental conditions applicable to a bogey electron device of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions. The device manufacturer chooses these values to provide acceptable serviceability of the device, taking responsibility for the effects of changes in operating conditions due to variations in device characteristics. The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey device under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, and environmental conditions.

C. For use with sinusoidal supply voltages within the frequency range of 25 to 1000 cycles.

D. AC Plate Voltage is measured without load.

2458
3030A
5-8-61

RADIO CORPORATION OF AMERICA

ELECTRON TUBE DIVISION

HARRISON, NEW JERSEY

April 28, 1961

Mr. G. F. Hohn
EIA Standards Lab.
32 Green Street
Newark 2, New Jersey

Dear Sir:

Release No.3030 covered registration of tube type 5V3A.

This release specifies that the 5V3A may utilize either the B8-118 or B8-110 base.

We propose reregistration of the 5V3A to include use of base B5-121, as follows:

ITEM	AS REGISTERED	AS PROPOSED
Under Mechanical Data:		
Base	JEDEC B8-118 or JEDEC B8-110	JEDEC B8-118 or JEDEC B8-110 or JEDEC B5-121
Base Pin Connections	Pin 1 - No Connection Pin 2 - Filament Pin 3 - No Connection Pin 4 - Plate #2 Pin 5 - No Connection Pin 6 - Plate #1 Pin 7 - No Connection Pin 8 - Filament	As registered for B8-118 and B8-110. For B5-121 as follows: Pin 1 - No Connection Pin 2 - Filament Pin 4 - Plate #2 Pin 6 - Plate #1 Pin 8 - Filament

Very truly yours,

C. D. Mitchell

C. D. Mitchell
Administrator, Commercial
Engineering Coordination

CDM/pd

Con Nohn

TUNG-SOL
ELECTRIC INC.

200 BLOOMFIELD AVENUE • BLOOMFIELD • N • J • PILGRIM 8 • 8700

November 29, 1960

Mr. G. F. Hohn
EIA Standards Laboratories
32 Green Street
Newark 2, New Jersey

Dear Mr. Hohn:

Confirming a telephone conversation between Mr. Max Bareiss of Tung-Sol Electric, Inc. and Mrs. Virginia Petruzziello of your organization, we are reporting inadvertent errors on page two of our Tube Data Sheet for type 5V3A issued with Release No. 3030 dated November 21, 1960.

Under Rectifier Service the third line should read:

STEADY STATE PEAK PLATE CURRENT(Each Plate)		1.4 amps

Under Typical Operating Conditions and Characteristics lines two, three, and four should read:

FILTER INPUT CAPACITOR	40	40 microf
EFFECTIVE PLATE SUPPLY RESISTANCE (Each Plate)	20	50 ohms
DC OUTPUT CURRENT	380	350 mamps

We have arranged for more careful proof-reading on all future data sheets that we send you.

Very truly yours,

Arthur A. Gibson

Arthur A. Gibson
Specifications Department

AAG/jb

Rel. 3030

TUNG-SOL
ELECTRIC INC.

200 BLOOMFIELD AVENUE • BLOOMFIELD • N • J • PILGRIM 8 • 8700

November 11, 1960

Mr. G. F. Hohn
EIA Standards Laboratories
32 Green Street
Newark 2, New Jersey

Dear Mr. Hohn:

We wish to proceed with the registration of type 5V3A, which was reserved for us on August 24, 1960.

Enclosed are two copies of our final data and 350 copies of this sheet are being sent to your New York Engineering office.

Very truly yours,

Arthur A. Gibson
Arthur A. Gibson
Specifications Department

AAG/jmb

TYPE 5V3A

TWIN DIODE

FOR FULL-WAVE POWER RECTIFIER APPLICATIONS

The 5V3A is a filamentary full wave, high vacuum rectifier designed for service in the power supply of television receivers or other equipment requiring high currents.

MECHANICAL DATA

Coated Filament		
Outline Drawing	JEDEC 12-16	Bulb T-12
Base	JEDEC B8-118 or JEDEC B8-110	short medium shell octal 8 pin with barrier
Maximum Diameter		1.562 inches
Maximum Overall Length		4.625 inches
Maximum Seated Height		4.062 inches
Base Pin Connections:		JEDEC 5T
Pin 1 - No connection		Pin 5 - No connection
Pin 2 - Filament		Pin 6 - Plate #1
Pin 3 - No connection		Pin 7 - No connection
Pin 4 - Plate #2		Pin 8 - Filament
Mounting Position		Vertical
If pins 2 and 4 are in a vertical plane		Horizontal

ELECTRICAL DATA

Filament Characteristics and Ratings

Filament Voltage[A]	5.0±0.5 volts
Filament Current at 5.0 volts	3.0 amps

Tube Voltage Drop, tube conducting 350 ma each plate 42 volts

November 10, 1960

ELECTRICAL DATA-Cont'd

MAXIMUM RATINGS-Interpreted according to design maximum system[B]

Rectifier Service[C]		
Peak Inverse Plate Voltage	1550	volts
RMS AC Plate Supply Voltage(Each Plate)	550	volts
Steady State Peak Plate Current(Each Plate)	1.4	volts
Transient Peak Plate Current(Each Plate)	6.6	amps
DC Output Current(Condenser Input)	415	mamps
with AC Plate Supply Voltage of 470 volts RMS		
Bulb Temperature	240	°C

Typical Operating Conditions and Characteristics

Full Wave Rectifier-Capacitor Input Filter

AC Plate Supply Voltage(Each Plate)RMS[D]	300	425	volts
Filter Input Capacitor	40	40	volts
Effective Plate Supply Resistance(Each Plate)	20	50	volts
DC Output Current	380	350	volts
DC Output Voltage at Filter Input	300	440	volts

Full Wave Rectifier-Choke Input Filter

AC Plate Supply Voltage(Each Plate)RMS[D]	500	volts
Filter Input Choke	10	henry
DC Output Current	350	mamps
DC Output Voltage at Filter Input	390	volts

A. The equipment designer shall so design the equipment that the filament voltage is centered at the specified bogey value.

B. Design-Maximum Ratings are limiting values of operating and environmental conditions applicable to a bogey electron device of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions. The device manufacturer chooses these values to provide acceptable serviceability of the device, taking responsibility for the effects of changes in operating conditions due to variations in device characteristics. The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey device under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, and environmental conditions.

C. For use with sinusoidal supply voltages within the frequency range of 25 to 1000 cycles.

D. AC Plate Voltage is measured without load.

ELECTRONIC INDUSTRIES ASSOCIATION

ENGINEERING DEPARTMENT
STANDARDS LABORATORY
32 GREEN STREET • NEWARK 2, N. J.
Telephone: MArket 3-7245

To:

Date:

Mr. Arthur A. Gibson
Tung-Sol Electric Inc.
200 Bloomfield Avenue
Bloomfield, New Jersey

August 24, 1960

Subject: Notice of JEDEC Type Assignment

The following JEDEC type assignments have been made in accordance with your request of **August 12, 1960.**

JEDEC No.	Your No.
5V3A	DF-817C

This assignment has been made assuming that the dimensions shown on your data sheet will be changed to conform with those registered for the 5V3.

Assignment has been made in accordance with applicable standards and rules adopted by the Joint Electron Device Engineering Councils.

Very truly yours,

G. F. HOHN, Manager
EIA Standards Laboratory

GFH:BH

1694

TUNG-SOL
ELECTRIC INC.

200 BLOOMFIELD AVENUE • BLOOMFIELD • N • J • PILGRIM 8 • 8700

August 12, 1960

JEDEC # 5V3A T-S # DT-817C

Mr. G. F. Hohn
EIA Standards Laboratories
32 Green Street
Newark 2, New Jersey

Dear Mr. Hohn:

We are requesting the reservation of a type designation for the Tung-Sol developmental tube DT-817C as defined by the enclosed tentative data sheets.

This is primarily an entertainment type and should be assigned its number accordingly.

Very truly yours,

Arthur A. Gibson

Arthur A. Gibson
Specification Department

AA/pp
Encl:

EIA STANDARDS LABORATORY AUG 16 1960

8/8/60

TUNG-SOL ELECTRIC INC.

5V3A

DT-817C

Tentative Data

The DT-817A is a filamentary full wave, high vacuum rectifier designed for service in the power supply of television receivers or other equipment requiring high currents.

MECHANICAL DATA

Coated Filament		
Outline Drawing	JEDEC ~~12-17~~ 12/16	Bulb T-12
Base	JEDEC B8-118 or JEDEC B8-110	short medium shell octal 8 pin with barrier
Maximum Diameter		1.562 Inches
Maximum Overall Length		~~4 5/8 5~~ Inches
Maximum Seated Height		~~4-7/16~~ 4 11/16 Inches
Base Pin Connections:		JEDEC 5T
Pin 1 - No connection		Pin 5 - no connection
Pin 2 - Filament		Pin 6 - Plate #1
Pin 3 - No connection		Pin 7 - No connection
Pin 4 - Plate #2		Pin 8 - Filament
Mounting Position		Vertical

(Horizontal Operation is permitted if Pins 2 and 4 are in a Vertical plane).

ELECTRICAL DATA

Filament Characteristics

Filament Voltage [A]	5.0 ± 0.5	volts
Filament Current [B]	3.0	Amp.
Tube Voltage Drop (Tube conducting 350 ma. each plate)	42	Volts

Ratings - Interpreted according to Design Maximum System[C]

Rectifier Service [D]		
Maximum Peak Inverse Plate Voltage	1550	Volts
Maximum RMS AC Plate Supply Voltage (Each Plate)	550	Volts
Maximum Steady State Peak Plate Current (Each Plate)	1.4	Amp.
Maximum Transient Peak Plate Current (Each Plate)	6.6	Amp.
Maximum DC Output Current (Condenser Input) with AC Plate Supply Voltage of 470 volts RMS	415	mA
Maximum Bulb Temperature	240°C	

ELECTRICAL DATA - Cont'd.

Typical Operating Conditions and Characteristics

Full Wave Rectifier - Capacitor Input Filter

AC Plate Supply Voltage (Each Plate) RMS[E]	300	425	Volts
Filter Input Capacitor	40	40	µf
Effective Plate Supply Resistance (Each Plate)	20	50	ohms
DC Output Current	380	350	mA
DC Output Voltage at Filter Input	300	440	Volts

Full Wave Rectifier - Choke Input Filter

AC Plate Supply Voltage (Each Plate) RMS[E]	500	Volts
Filter Input Choke	10	Henrys
DC Output Current	350	mA
DC Output Voltage at Filter Input	390	Volts

A - The equipment designer shall so design the equipment that the filament voltage is centered at the specified bogey value.

B - At heater volts - 5.0

C - Design-Maximum Ratings are limiting values of operating and environmental conditions applicable to a bogey electron device of a specified type as defined by its published data, and should not be exceeded under the worst probable conditions. The device manufacturer chooses these values to provide acceptable serviceability of the device, taking responsibility for the effects of changes in operating conditions due to variations in device characteristics. The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey device under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, and environmental conditions.

D - For use with simusoidal supply voltages within the frequency range of 25 to 1000 cycles.

E - AC Plate voltage is measured without load.

Release No. 3030A
Type No. 5V3A

ITEM	AS REGISTERED	AS PROPOSED
Under Mechanical Data:		
Base	JEDEC B8-118 or JEDEC B8-110	JEDEC B8-118 or JEDEC B8-110 or JEDEC B5-121
Base Pin Connections	Pin 1 - No Connection Pin 2 - Filament Pin 3 - No Connection Pin 4 - Plate #2 Pin 5 - No Connection Pin 6 - Plate #1 Pin 7 - No Connection Pin 8 - Filament	As registered for B8-118 and B8-110. For B5-121 as follows: Pin 1 - No Connection Pin 2 - Filament Pin 4 - Plate #2 Pin 6 - Plate #1 Pin 8 - Filament