

# 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 Registration

Release No. 3013

November 7, 1960

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

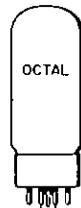
5DJ4

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

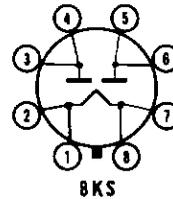
CBS Electronics  
Danvers, Massachusetts

## FULL-WAVE POWER RECTIFIER

(WITH DOUBLE FILAMENT LEADS)



### 5DJ4



CBS Type 5DJ4 is a high-vacuum full-wave power rectifier designed for more reliable operation. It has specially designed double filament leads and double plate leads which reduce the current through each lead to one-half the current of single lead tubes. The lower current protects against harmful hot spots in lead connections.

Electrically, the 5DJ4 is identical to the 5U4GB and may be used for the same applications.

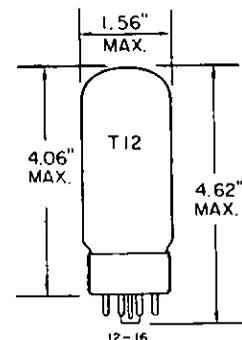
### MECHANICAL DATA

Cathode, coated filament	
Bulb	T-12
Outline	12-16
Base, short medium shell octal	B8-118
Basing	8KS
Mounting position	Vertical*

\* Horizontal operation permitted if pin 2 and 4 are in a vertical plane.

### PIN CONNECTIONS

Pin 1:	Filament (I.C. to Pin 2)
Pin 2:	Filament (I.C. to Pin 1)
Pin 3:	Plate 2 (I.C. to Pin 4)
Pin 4:	Plate 2 (I.C. to Pin 3)
Pin 5:	Plate 1 (I.C. to Pin 6)
Pin 6:	Plate 1 (I.C. to Pin 5)
Pin 7:	Filament (I.C. to Pin 8)
Pin 8:	Filament (I.C. to Pin 7)



## ELECTRICAL DATA

### FILAMENT CHARACTERISTICS

Voltage, a-c or d-c	5.0	volts
Current	3.0	amp*

\* 1.5 amp per base lead

### MAXIMUM RATINGS (Design maximum values)

#### Rectifier Service †

Plate voltage, peak inverse	1700	volts
Plate supply voltage, rms (Rating Chart I)	600	volts
D-c output current (Rating Chart I)		
Steady-state peak plate current, each plate (Rating Chart II)	1.0	amp
Transient peak plate current, each plate (Rating Chart III)	5.0	amp

### AVERAGE CHARACTERISTICS

Tube conducting 225 ma (each plate)	44	volts
275 ma (each plate)	50	volts
300 ma (each plate)	54	volts

### TYPICAL OPERATION

#### Full-Wave Rectifier (Capacitor Input Filter)

Plate supply voltage, rms (each plate) ‡	300	450	volts
Plate supply resistance (each plate)	21	67	ohms
Filter input capacitor	40	40	μf
Output current, d-c	300	275	ma
Output voltage at filter input, d-c	290	460	volts

#### Full-Wave Rectifier (Choke Input Filter)

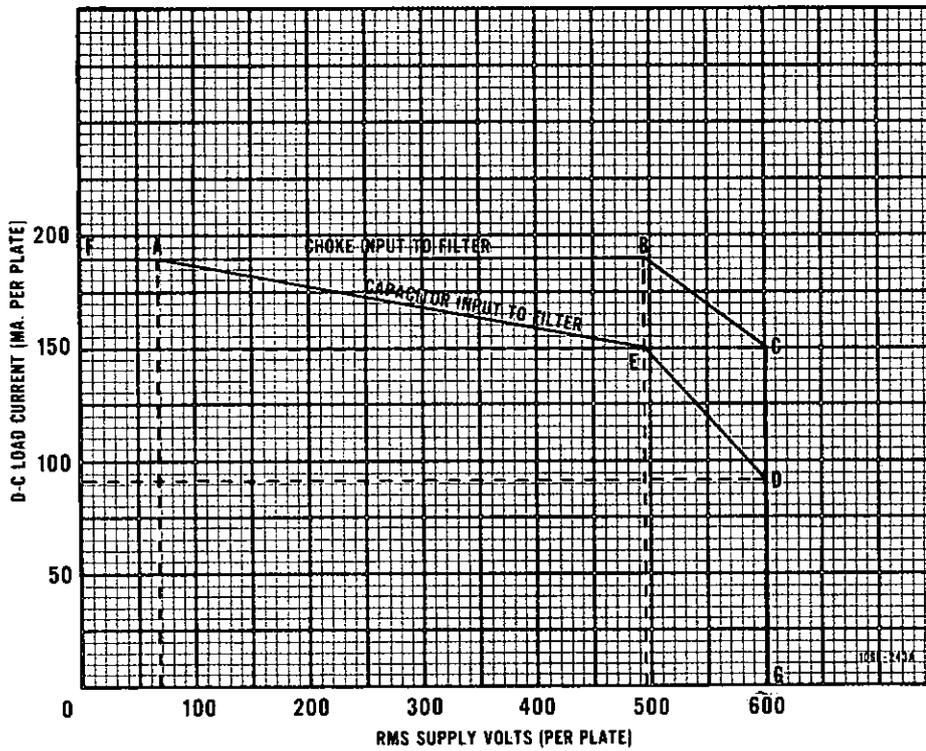
Plate supply voltage, rms (each plate) ‡	550	volts
Filter input choke	10	henrys
Output current, d-c	275	ma
Output voltage at filter input, d-c	420	volts

† For use with sinusoidal supply voltages within the frequency range of 25 to 1000 c.p.s.

‡ The indicated a-c supply voltage is measured without load.

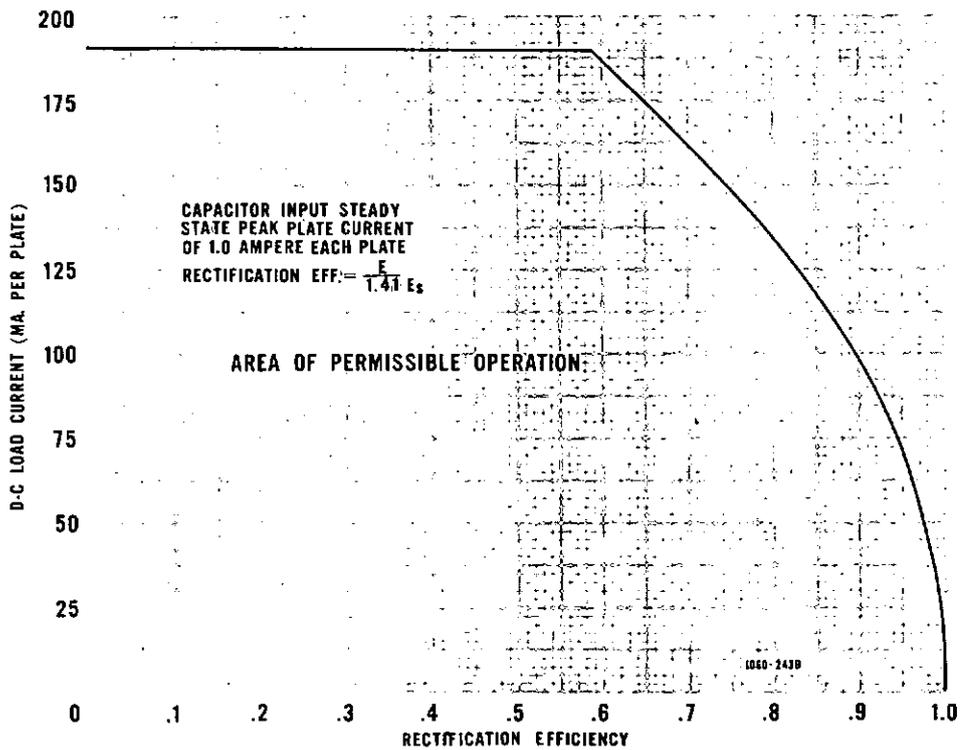
# RATING CHART I

DESIGN MAXIMUM SYSTEM



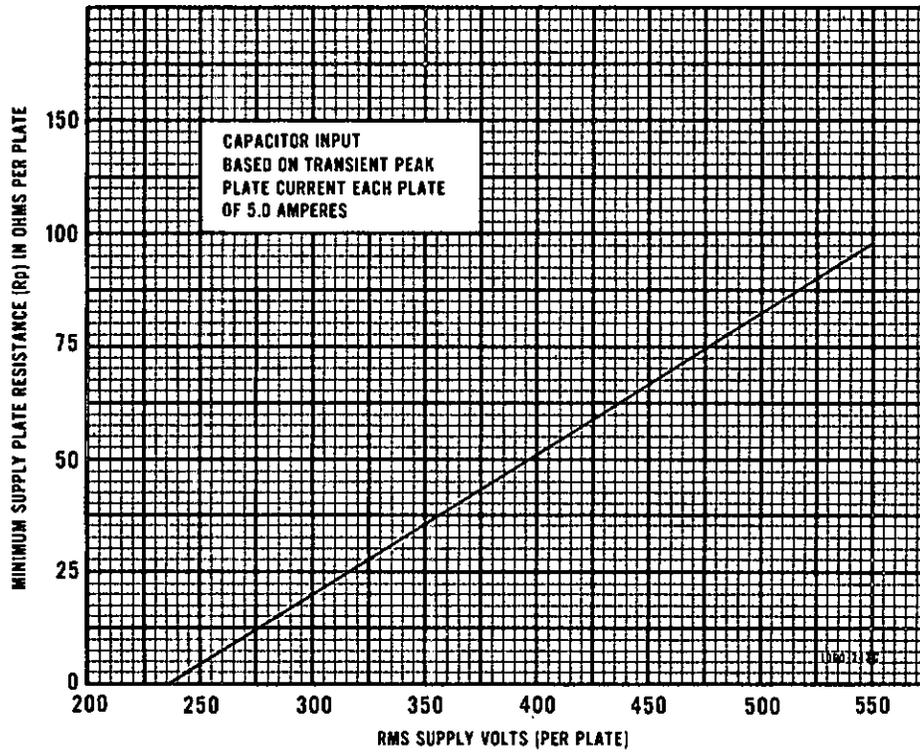
# RATING CHART II

DESIGN MAXIMUM SYSTEM



# RATING CHART III

DESIGN MAXIMUM SYSTEM



Rel 3013

# CBS ELECTRONICS

*A Division of Columbia Broadcasting System, Inc.*

DANVERS, MASSACHUSETTS • TELEPHONE, SPRING 4-2360

ELECTRON TUBES  SEMICONDUCTORS

October 26, 1960

Mr. G. F. Hohn  
Electronic Industries Association  
32 Green Street  
Newark, New Jersey

Dear Mr. Hohn:

CBS Electronics wishes to register 5DJ4.

We are forwarding 350 copies of data sheets for this type to the New York engineering office, under separate cover.

Yours truly,

CBS Electronics



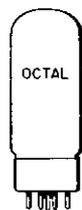
W.O. Hamlin, Supervisor  
Technical Publications

WOH/cgg

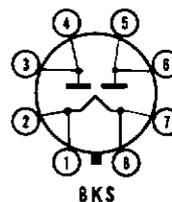


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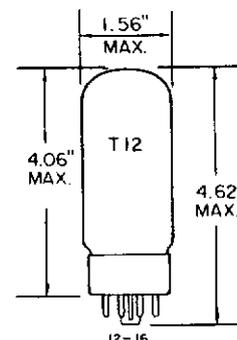
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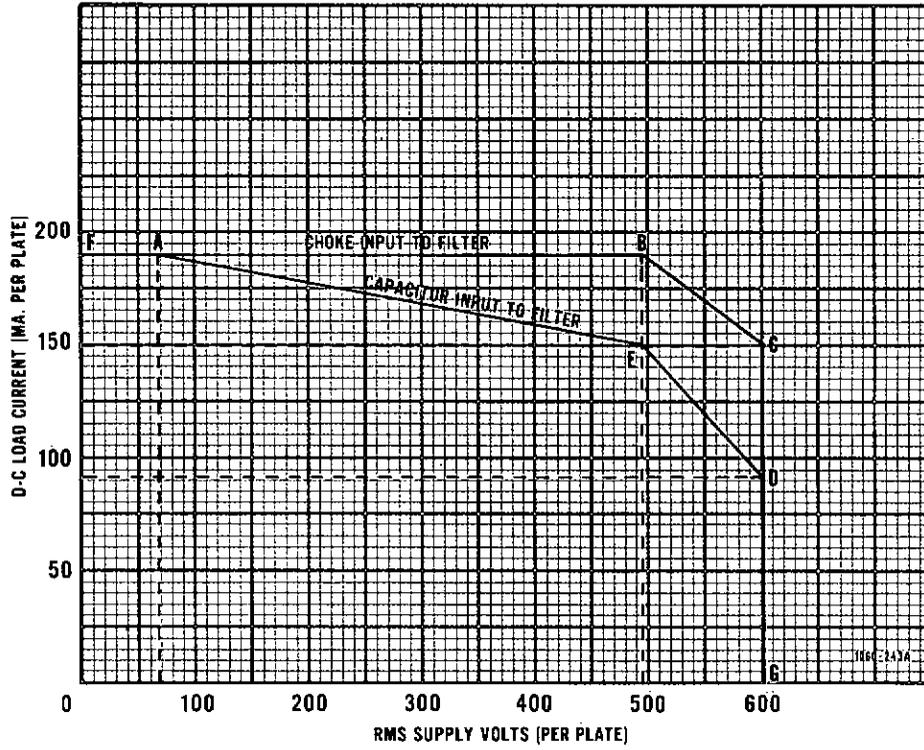
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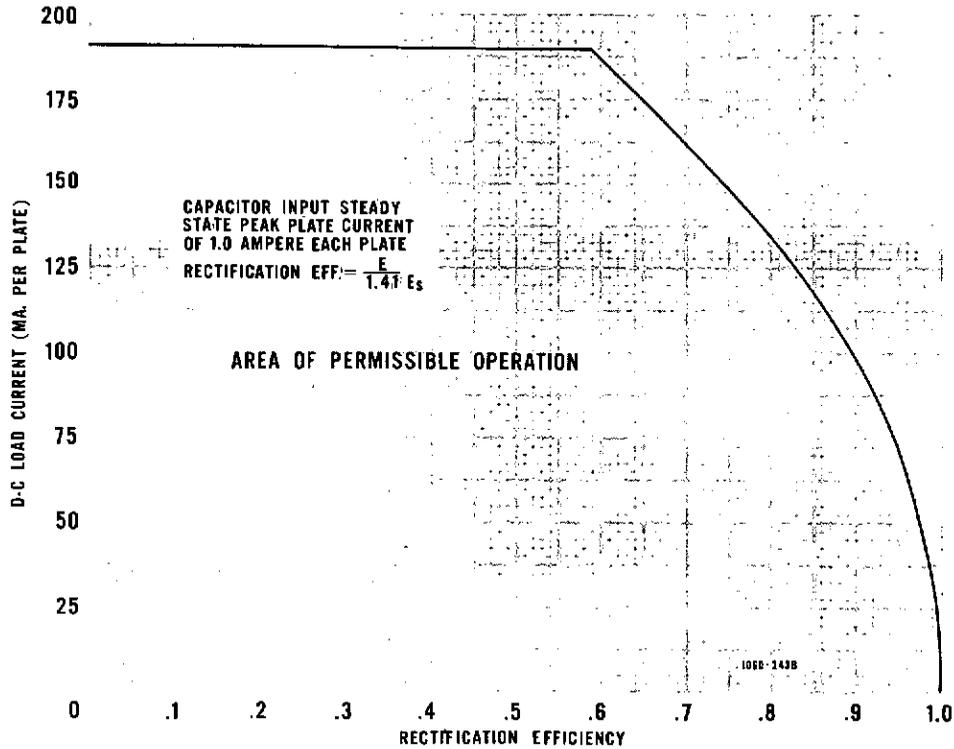
# RATING CHART I

DESIGN MAXIMUM SYSTEM



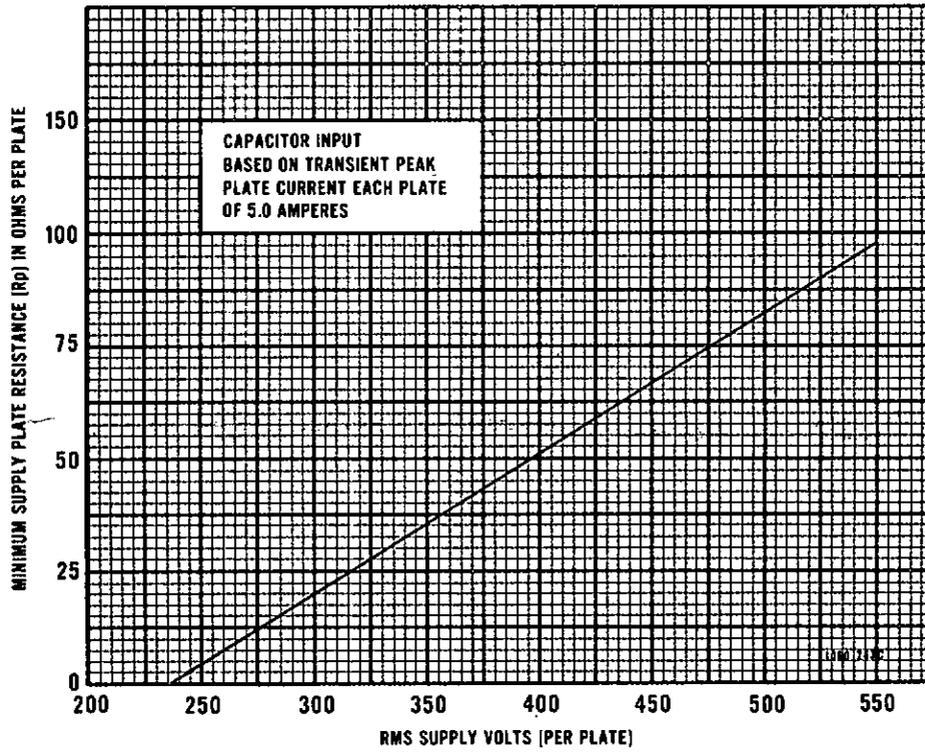
# RATING CHART II

DESIGN MAXIMUM SYSTEM



# RATING CHART III

DESIGN MAXIMUM SYSTEM



WESTERN UNION

Telefax

FD324 06412

B NYAO 16 PD=MUX YT DANVERS MASS 13 359P EDT=  
EIA STANDARDS LAB ATTN G F HOHN MGR= 10 OCT 13 PM 4 18  
32 GREEN ST NEWARK NJER=

REGISTRATION FOR TYPE 5B J4 WILL BE MAILED TO YOU ON  
FRIDAY OCTOBER 21=

CBS ELECTRONICS W O HAMLIN== *gdp*

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM PATRONS CONCERNING ITS SERVICE

*Telefax*

# WESTERN UNION

SENDING BLANK

*Telefax*



CALL  
LETTERS

**FSB**

**PD**

CHARGE  
TO

**ELECTRONIC INDUSTRIES ASSN**

**FAX NEWARK NJER OCTOBER 13 1960 2:45 P**

**MR. W. O. HAMLIN  
CBS ELECTRONICS  
DANVERS, MASSACHUSETTS**

**HAVE URGENT REQUEST INFO YOUR TYPE 5DJ4. HOW SOON CAN REGIS-  
TRATION BE COMPLETED?**

**G. F. HOHN, MANAGER  
EIA STANDARDS LABORATORY**

*Send the above message, subject to the terms on back hereof, which are hereby agreed to*

**PLEASE TYPE OR WRITE PLAINLY WITHIN BORDER—DO NOT FOLD**

ALL MESSAGES TAKEN BY THIS COMPANY ARE SUBJECT TO THE FOLLOWING TERMS:

[Faint, mostly illegible text, likely terms and conditions of service]

CLASSES OF SERVICE

DOMESTIC SERVICES

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WEEK END MESSAGE

INTERNATIONAL SERVICES

FULL RATE

LETTER TELEGRAM (L.T.)

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