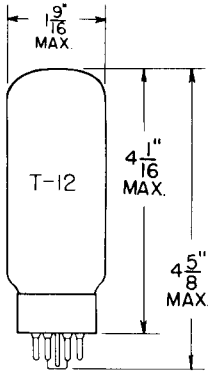
TUNG-SOL

TWIN DIODE



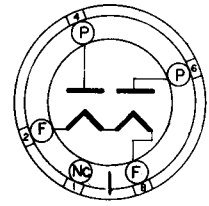
GLASS BULB

COATED FILAMENT

5.0 VOLTS 3.8 AMP.
AC OR DC

VERTICAL MOUNTING POSITION

HORIZONTAL OPERATION IS PERMITTED IF PINS 2 AND 4 ARE IN A VERTICAL PLANE.



BOTTOM VIEW
SHORT-MEDIUM SHELL
8 PIN OCTAL
5T

THE 5V3 IS A FILAMENTARY, FULL-WAVE, HIGH VACUUM RECTIFIER DESIGNED FOR SERVICE IN THE POWER SUPPLY OF COLOR TELEVISION RECEIVERS OR OTHER EQUIPMENT REQUIRING HIGH CURRENT.

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

RECTIFIER SERVICE [B]

FILAMENT VOLTAGE	5.0	VOLTS
MAXIMUM PEAK INVERSE PLATE VOLTAGE	1 400	VOLTS
MAXIMUM AC PLATE SUPPLY VOLTAGE (EACH PLATE) RMS (SEE RATING CHART #1)	500	VOLTS
MAXIMUM STEADY STATE PEAK PLATE CURRENT (EACH PLATE) (SEE RATING CHART #2)	1.2	AMP.
MAXIMUM TRANSIENT PEAK PLATE CURRENT (EACH PLATE) (SEE RATING CHART #3)	5.5	AMP.
MAXIMUM DC OUTPUT CURRENT	SEE RATING CHART #1	

[B] FOR USE WITH SINUSOIDAL SUPPLY VOLTAGES WITHIN THE FREQUENCY RANGE OF 25 TO 1000 CPS.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

FULL WAVE RECTIFIER – CAPACITOR INPUT FILTER

FILAMENT VOLTAGE	5.0		VOLTS
FILAMENT CURRENT	3.8		AMP.
AC PLATE SUPPLY VOLTAGE (EACH PLATE) RMS[C]	300	425	VOLTS
FILTER INPUT CAPACITOR	40	40	μf
EFFECTIVE PLATE SUPPLY RESISTANCE (EACH PLATE)	24	56	OHMS
DC OUTPUT CURRENT	380	350	MA.
DC OUTPUT VOLTAGE AT FILTER INPUT	285	430	VOLTS

[C] AC PLATE VOLTAGE IS MEASURED WITHOUT LOAD.

CONTINUED ON FOLLOWING PAGE

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TUNG-SOL

CONTINUED FROM PRECEDING PAGE

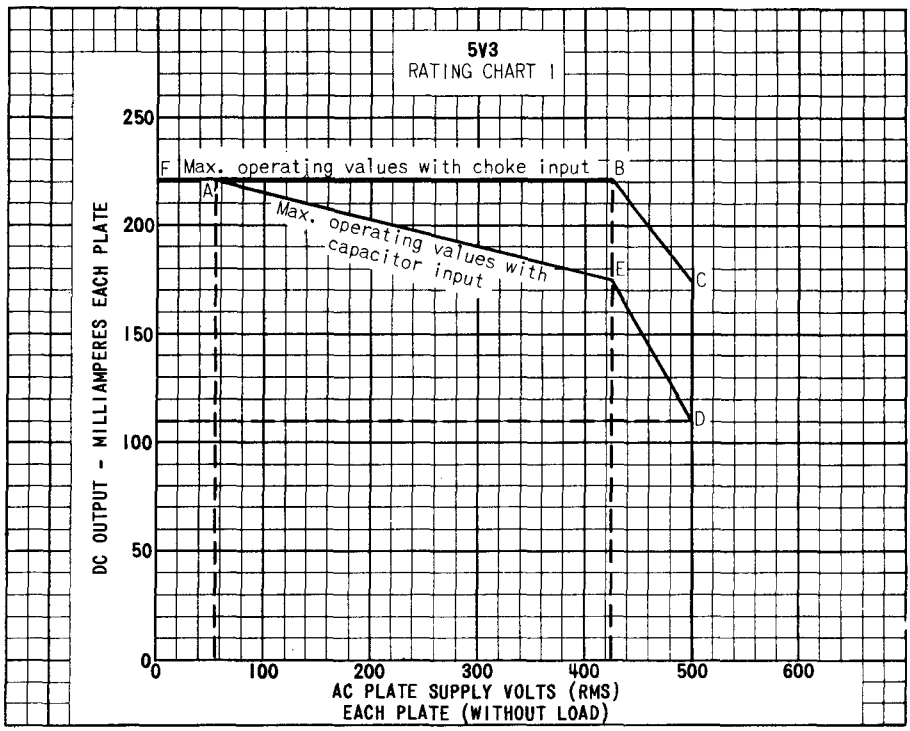
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS – CONT'D.

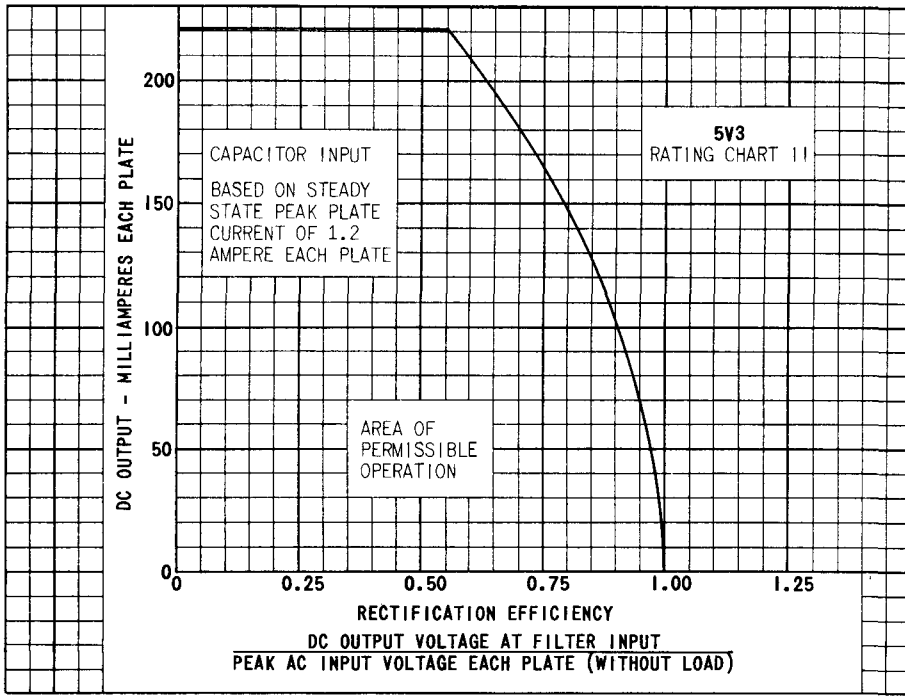
FULL WAVE RECTIFIER – CHOKE INPUT FILTER

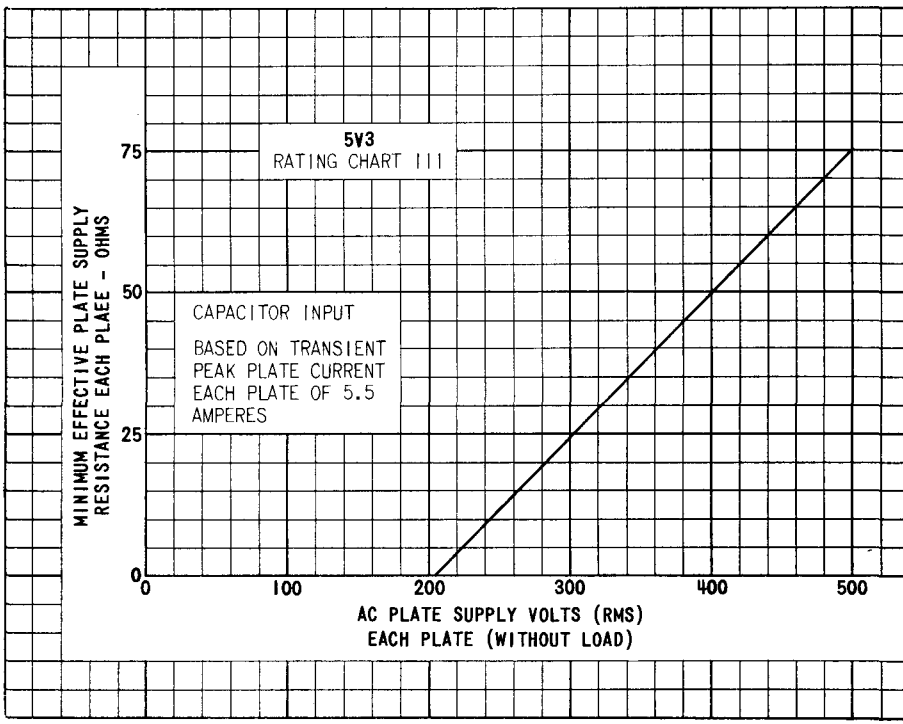
FILAMENT VOLTAGE	5.0	VOLTS
FILAMENT CURRENT	3.8	AMP.
AC PLATE SUPPLY VOLTAGE (EACH PLATE) RMS[C]	500	VOLTS
FILTER INPUT CHOKE	10	HENRYS
DC OUTPUT CURRENT	350	MA.
DC OUTPUT VOLTAGE AT FILTER INPUT	385	VOLTS
TUBE VOLTAGE DROP TUBE CONDUCTING 350 MA. (EACH PLATE)*	47	VOLTS

[C] AC PLATE VOLTAGE IS MEASURED WITHOUT LOAD.

* INDICATES AN ADDITION.




DC OUTPUT - MILLIAMPERES EACH PLATE
200
150
100
50
0
CAPACITOR INPUT
BASED ON STEADY STATE PEAK PLATE CURRENT OF 1.2 AMPERE EACH PLATE
5V3
RATING CHART II
AREA OF PERMISSIBLE OPERATION
0
0.25
0.50
0.75
1.00
1.25
RECTIFICATION EFFICIENCY
DC OUTPUT VOLTAGE AT FILTER INPUT
PEAK AC INPUT VOLTAGE EACH PLATE (WITHOUT LOAD)


MINIMUM EFFECTIVE PLATE SUPPLY RESISTANCE EACH PLAEE - OHMS
75
50
25
0
5V3
RATING CHART III
CAPACITOR INPUT
BASED ON TRANSIENT PEAK PLATE CURRENT EACH PLATE OF 5.5 AMPERES
0
100
200
300
400
500
AC PLATE SUPPLY VOLTS (RMS)
EACH PLATE (WITHOUT LOAD)