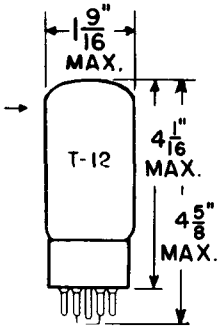
TUNG-SOL

DOUBLE DIODE



GLASS BULB

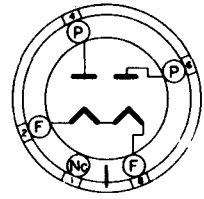
COATED FILAMENT

5.0 VOLTS 3.0 AMP.

AC OR DC

VERTICAL MOUNTING POSITION

HORIZONTAL OPERATION IS PERMITTED IF PINS 1 AND 4 ARE IN A VERTICAL PLANE.



BOTTOM VIEW

MEDIUM SHELL
5 PIN OCTAL

5T

THE 5U4GB IS A FILAMENTARY FULL-WAVE HIGH VACUUM RECTIFIER DESIGNED FOR USE IN THE POWER SUPPLY OF TELEVISION RECEIVERS AND OTHER EQUIPMENT WHICH HAS HIGH OUTPUT CURRENT REQUIREMENTS. IT IS A REPLACEMENT FOR THE 5U4G; HOWEVER, THE 5U4GB HAS A STRAIGHT SIDED T-12 ENVELOPE AND HAS HIGHER CURRENT RATINGS THAN THE 5U4G.

RATINGS

INTEPRETED ACCORDING TO DESIGN CENTER SYSTEM

RECTIFIER SERVICE[A]

FILAMENT VOLTAGE	5.0	VOLTS
MAXIMUM PEAK INVERSE PLATE VOLTAGE	1550	VOLTS
MAXIMUM PLATE SUPPLY VOLTAGE (EACH PLATE) RMS (SEE RATING CHART #1)	550	VOLTS
MAXIMUM DC OUTPUT CURRENT (SEE RATING CHART #1)	---	
MAXIMUM STEADY STATE PEAK PLATE CURRENT (EACH PLATE))SEE RATING CHART #2	1.0	AMP.
MAXIMUM TRANSIENT PEAK PLATE CURRENT (EACH PLATE) SEE RATING CHART #3	4.6	AMP
TUBE VOLTAGE DROP TUBE CONDUCTING: 225 MA. EACH PLATE	44	VOLTS
275 MA. EACH PLATE	50	VOLTS
300 MA. EACH PLATE	54	VOLTS

[A] FOR USE WITH SINUSOIDAL SUPPLY VOLTAGES WITHIN THE FREQUENCY RANGE OF 25 TO 1000 CYCLES PER SECOND.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

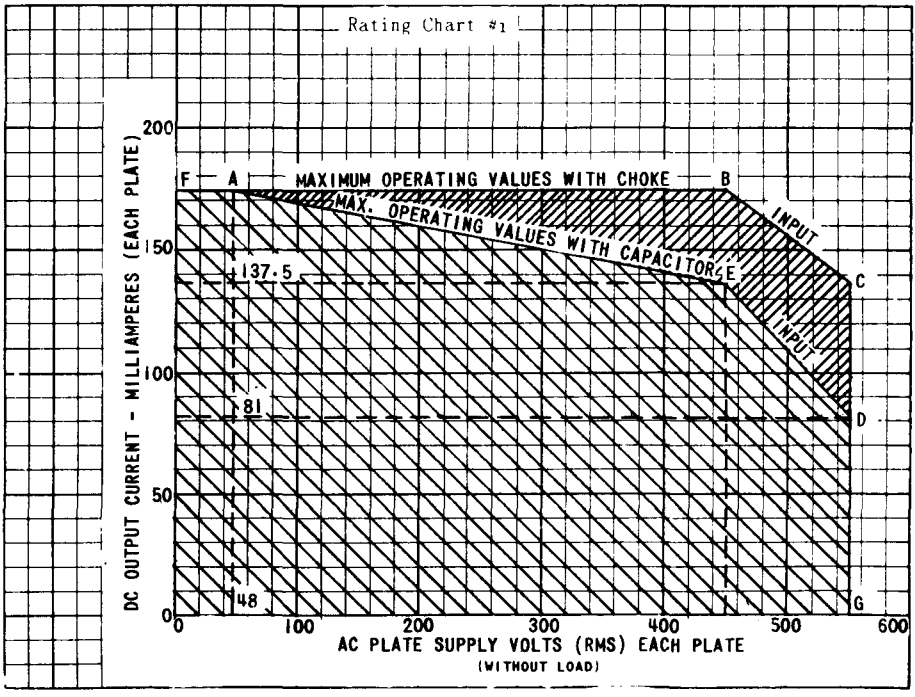
FULL-WAVE RECTIFIER – CAPACITOR INPUT FILTER

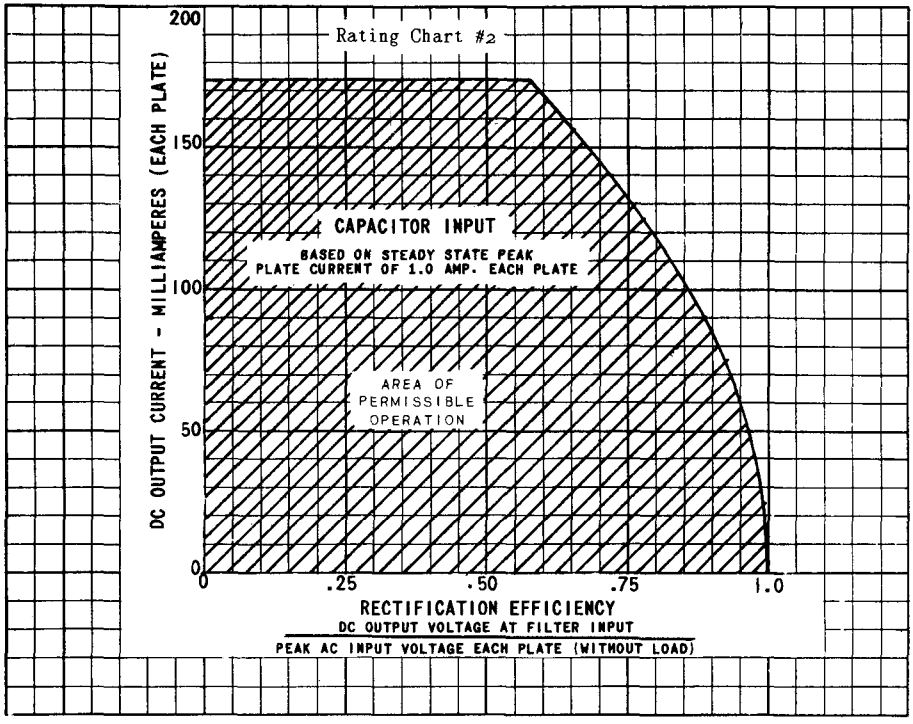
FILAMENT VOLTAGE	5.0		VOLTS
FILAMENT CURRENT	3.0		AMP.
AC PLATE SUPPLY VOLTAGE (EACH PLATE) RMS[B]	300	450	VOLTS
FILTER INPUT CAPACITOR	40	40	μf
EFFECTIVE PLATE-SUPPLY RESISTANCE (EACH PLATE)	21	67	OHMS
DC OUTPUT CURRENT	300	275	MA.
DC OUTPUT VOLTAGE AT FILTER INPUT	290	460	VOLTS

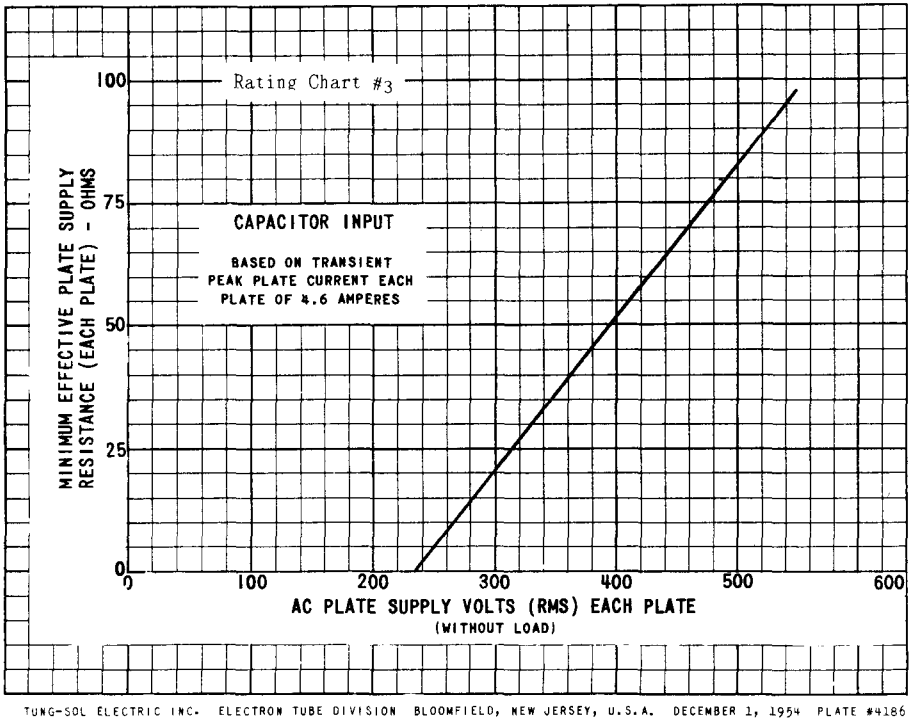
FULL-WAVE RECTIFIER – CHOKE INPUT FILTER

FILAMENT VOLTAGE	5.0	VOLTS
FILAMENT CURRENT	3.0	AMP.
AC PLATE SUPPLY VOLTAGE (EACH PLATE) RMS[B]	550	VOLTS
FILTER INPUT CHOKE	10	HENRYS
DC OUTPUT CURRENT	275	MA.
DC OUTPUT VOLTAGE AT FILTER INPUT	420	VOLTS

[B] AC PLATE VOLTAGE IS MEASURED WITHOUT LOAD.




Rating Chart #2
DC OUTPUT CURRENT - MILLIAMPERES (EACH PLATE)
200
150
100
50
0
CAPACITOR INPUT
BASED ON STEADY STATE PEAK
PLATE CURRENT OF 1.0 AMP. EACH PLATE
AREA OF
PERMISSIBLE
OPERATION
0
.25
.50
.75
1.0
RECTIFICATION EFFICIENCY
DC OUTPUT VOLTAGE AT FILTER INPUT
PEAK AC INPUT VOLTAGE EACH PLATE (WITHOUT LOAD)


Rating Chart #3
MINIMUM EFFECTIVE PLATE SUPPLY
RESISTANCE (EACH PLATE) - OHMS
100
75
50
25
0
CAPACITOR INPUT
BASED ON TRANSIENT
PEAK PLATE CURRENT EACH
PLATE OF 4.6 AMPERES
0
100
200
300
400
500
600
AC PLATE SUPPLY VOLTS (RMS) EACH PLATE
(WITHOUT LOAD)