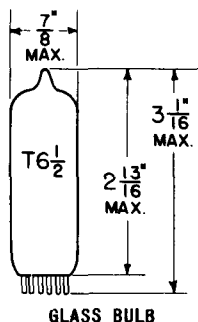


TUNG-SOL

TWIN DIODE
MINIATURE TYPE

GLASS BULB

6-4

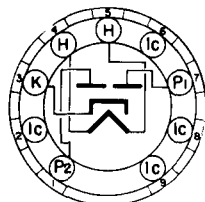
COATED UNIPOTENTIAL CATHODE

HEATER

6.3±10% VOLTS 1.0 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

SMALL BUTTON
9 PIN BASE

9M

THE 6CA4 IS A HEATER-CATHODE TWIN DIODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR FULL-WAVE RECTIFIER OPERATION, AND ESPECIALLY SUITABLE FOR COMPACT AMPLIFIER DESIGNS.

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

RECTIFIER SERVICE

MAXIMUM PEAK INVERSE PLATE VOLTAGE	1200	VOLTS
MAXIMUM AC PLATE-SUPPLY VOLTAGE PER PLATE	SEE RATING CHART #1	
MAXIMUM STEADY STATE PEAK PLATE CURRENT PER PLATE	500	MA.
MAXIMUM TRANSIENT PEAK PLATE CURRENT PER PLATE,		
MAXIMUM DURATION 0.2 SECONDS	1.85	AMP.
MAXIMUM DC OUTPUT CURRENT	SEE RATING CHART #1	
MAXIMUM HEATER-CATHODE VOLTAGE:		
HEATER NEGATIVE WITH RESPECT TO CATHODE	500	VOLTS

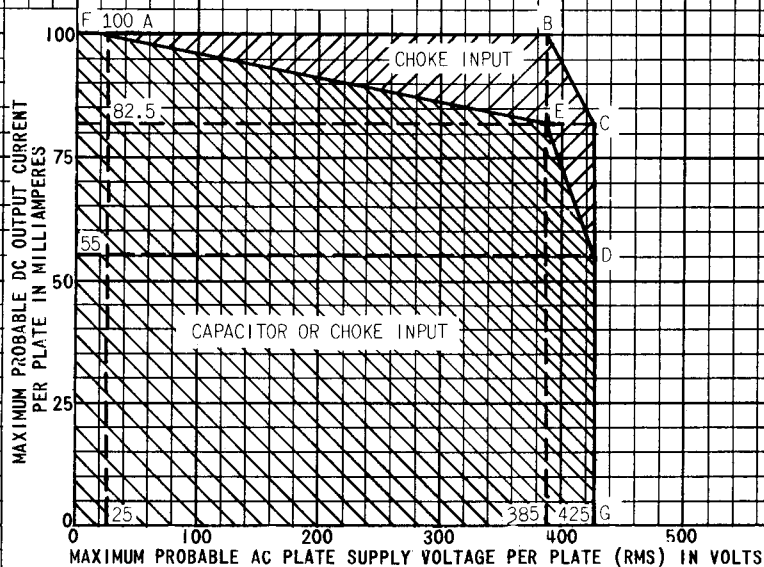
TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

FULL-WAVE RECTIFIER WITH CAPACITOR-INPUT FILTER

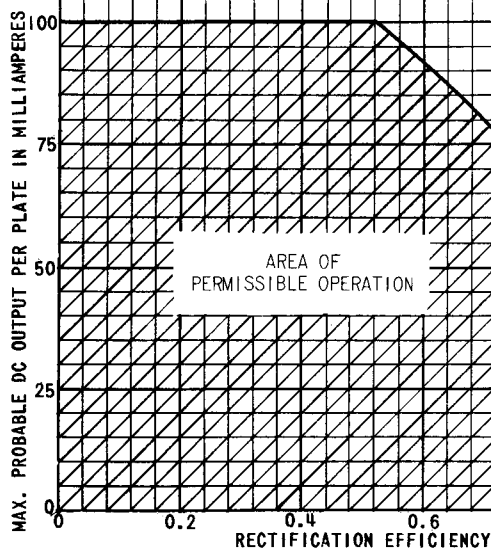
AC PLATE VOLTAGE PER PLATE, RMS	250	300	350	VOLTS
FILTER INPUT CAPACITOR	50	50	50	μf
TOTAL PLATE-SUPPLY RESISTANCE PER PLATE	150	200	240	OHMS
DC OUTPUT CURRENT	150	150	150	MA.
DC OUTPUT VOLTAGE AT FILTER INPUT	245	293	347	VOLTS
TUBE VOLTAGE DROP				
I _b = 150 MA. DC PER PLATE			20	VOLTS

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.

RATING CHART I
6CA4



RATING CHART II
6CA4



FOR CAPACITOR-INPUT FILTER
THE BOUNDARY CURVE IS BASED ON A
STEADY-STATE PEAK PLATE CURRENT
OF 0.5 AMPERE MAXIMUM PER PLATE.

$$\text{RECTIFICATION EFF.} = \frac{E}{1.41 E_s}$$

WHERE E = DC OUTPUT VOLTAGE AT
FILTER INPUT

E_s = RMS SUPPLY VOLTAGE
PER PLATE

