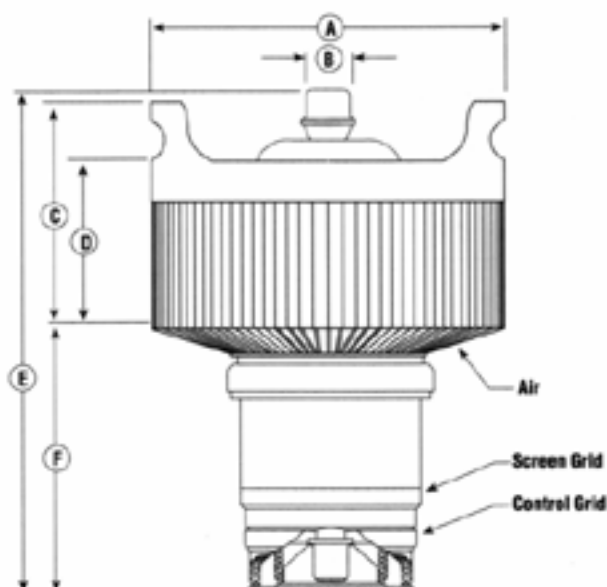


4CX15000A/8281 Outline Drawing



Dimensional Data

Dim.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	189	193	7.46	7.58
B	21.7	22.7	0.855	0.895
C	90.4	93.6	3.56	3.68
D	61.3	70.8	2.41	2.79
E	22.8	23.8	9.0	9.38
F	118	122	4.66	4.78

Electrical Application

Plate operation The rated maximum plate dissipation of the tube is 15 kilowatts. This power may be safely sustained with adequate air cooling. The tube must be protected from damage which may be caused by an internal arc occurring at high plate voltage. A protective resistance should always be connected in series with each tube anode to help absorb power-supply stored energy if an internal arc should occur.

Control grid operation The maximum control grid dissipation is 200 watts, determined (approximately) by the product of the dc grid current and the peak positive grid voltage.

Screen grid operation The maximum screen grid dissipation is 450 watts. With no ac applied to the screen grid, dissipation is the product of dc screen voltage and the dc screen current. Plate voltage, plate loading or bias voltage must never be removed while filament and screen voltages are present.

Filament operation Svetlana recommends that a new tube, or a tube which has been in storage for some period of time, be operated with filament voltage only applied for a period of from 30 to 60 minutes before full operation begins. Once normal operation has been established, a minimum filament warm-up time of four to five seconds is sufficient for full filament emission. Filament voltage should be measured at the socket.

At rated nominal filament voltage, the peak emission capability of the tube is many times that needed for communication service. A reduction in filament voltage will lower the filament temperature, and this reduction will substantially increase life expectancy. The correct value of filament voltage should be determined for the particular application. Svetlana recommends that the tube be operated at full nominal voltage for an initial stabilization period of 100 to 200 hours before any action is taken to operate at reduced voltage. The voltage should gradually be reduced until there is a slight degradation in performance—such as power output or distortion. The voltage should then be increased a few tenths of a volt above the value where performance degradation was first noted. The operating point should be rechecked after 24 hours.