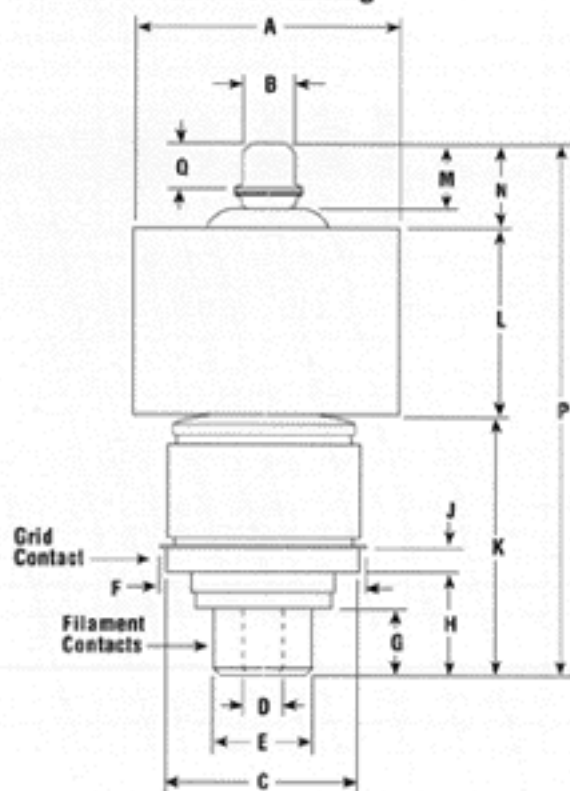


3CX2500A3 Outline Drawing



Electrical Application

Filament Operation The rated filament voltage for the 3CX2500A3 is 7.50 volts. Filament voltage, as measured at the filament collets, should be maintained within 5% of this value to obtain maximum tube life.

Mechanical Application

Mounting The 3CX2500A3 must be mounted with its axis vertical. The base of the tube may be up or down.

Filament Connections The Svetlana 3CX2500A3 filament connections require spring collets designed for a contact surface temperature of 250°C and with adequate symmetrical contact surface area for the filament and RF current.

Cooling Sufficient forced-air circulation must be provided to keep the temperature of the anode core and the temperatures of the ceramic/metal seals below 250°C. Airflow requirements to maintain these temperatures below 225°C with an inlet-air temperature of 40°C are tabulated. At frequencies above 30 MHz or at higher inlet-air temperatures, more airflow will be required.

Dimensional Data

Dim.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	103.99	105.56	4.094	4.156
B	19.83	21.44	0.781	0.844
C	75.95	76.45	2.990	3.010
D	15.62	16.13	0.615	0.635
E	37.85	38.35	1.490	1.510
F	-	92.08	-	3.625
G	20.65	23.80	0.813	0.937
H	34.92	41.28	1.375	1.625
J	9.93	10.72	0.391	0.422
K	98.43	107.95	3.875	4.250
L	74.60	77.80	2.937	3.063
N	30.15	42.85	1.187	1.687
P	203.20	228.60	8.000	9.000
Q	17.45	20.65	0.687	0.813

Base-to-Anode Air Flow

Anode Dissipation Watts	Sea Level		5000 Feet	
	Air Flow CFM	Pressure Drop Inches of Water	Air Flow CFM	Pressure Drop Inches of Water
2500	36	0.6	43	0.72
4000	67	1.20	80	1.45

Anode-to-Base Air Flow¹

Anode Dissipation Watts	Sea Level		5000 Feet	
	Air Flow CFM	Pressure Drop Inches of Water	Air Flow CFM	Pressure Drop Inches of Water
2500	42	0.70	50	0.84
4000	84	1.70	101	2.00

¹ When air is supplied in the anode-to-base direction, a minimum of 3 cfm must be directed into the filament-stem structure between the inner and outer filament terminals to maintain the base seals below 250°C. A separate air system is not required with base-to-anode airflow.