HARD TUBE PULSE MODULATOR TYPE 7750

The 7750 is a three-electrode tube designed for service as a hard tube modulator. The forced-air cooled anode is capable of dissipating 8 kilowatts. The cathode is a thoriated tungsten filament which may be operated with either d-c or single-phase a-c.

ELECTRICAL:

Cathode	Thoriated Tungsten Filament		
Filament:			
Voltage (d-c or single phase a-c)	8		Volts
Current	180		Amperes
Heating Time (minimum)	15		Seconds
Amplification Factor	20		

MECHANICAL:

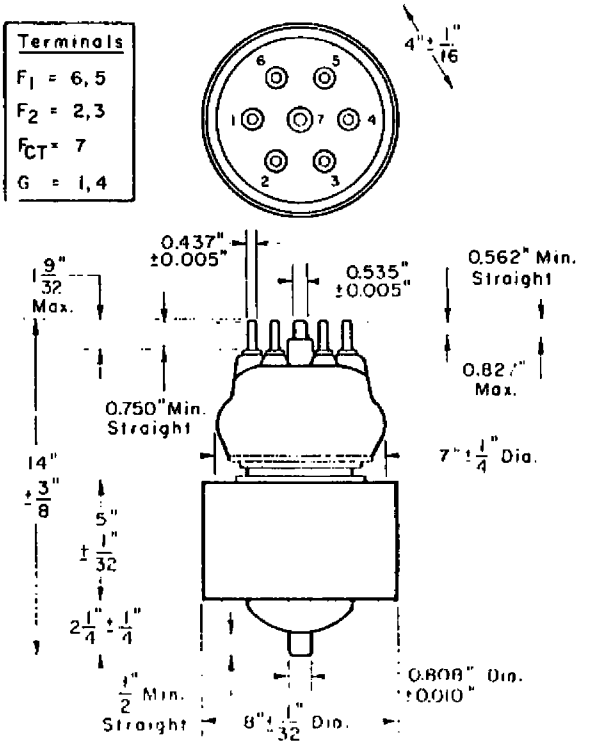
Mounting Position	Vertical, Anode Down		
Type of Cooling	Forced Air		
Required Air Flow Through Radiator:			
Plate Dissipation	6	8	Kilowatts
Air Flow	400	600	CFM
Static Back Pressure	0.6	1.0	In. H_2O
Maximum Bulb Temperature	180 °C		
Net Weight	30 Pounds		

MAXIMUM RATINGS:

Absolute Maximum Values

DC Plate Voltage	30	max.	Kilovolts
DC Grid Voltage	−2500	max.	Volts
Peak Positive Grid Voltage	2000	max.	Volts
Peak Pulse Plate Current	80	max.	Amperes
Peak Pulse Grid Current	20	max.	Amperes
Plate Dissipation	8	max.	Kilowatts
Grid Dissipation	800	max.	Watts
Pulse Length	1000	max.	Microseconds
Duty Factor	0.02	max.	
Peak Pulse Cathode Current	100*	max.	Amperes

* Peak pulse cathode current of 200 amperes is allowable on pulses of 10 microseconds or less duration if filament is elevated to 10.0 volts.



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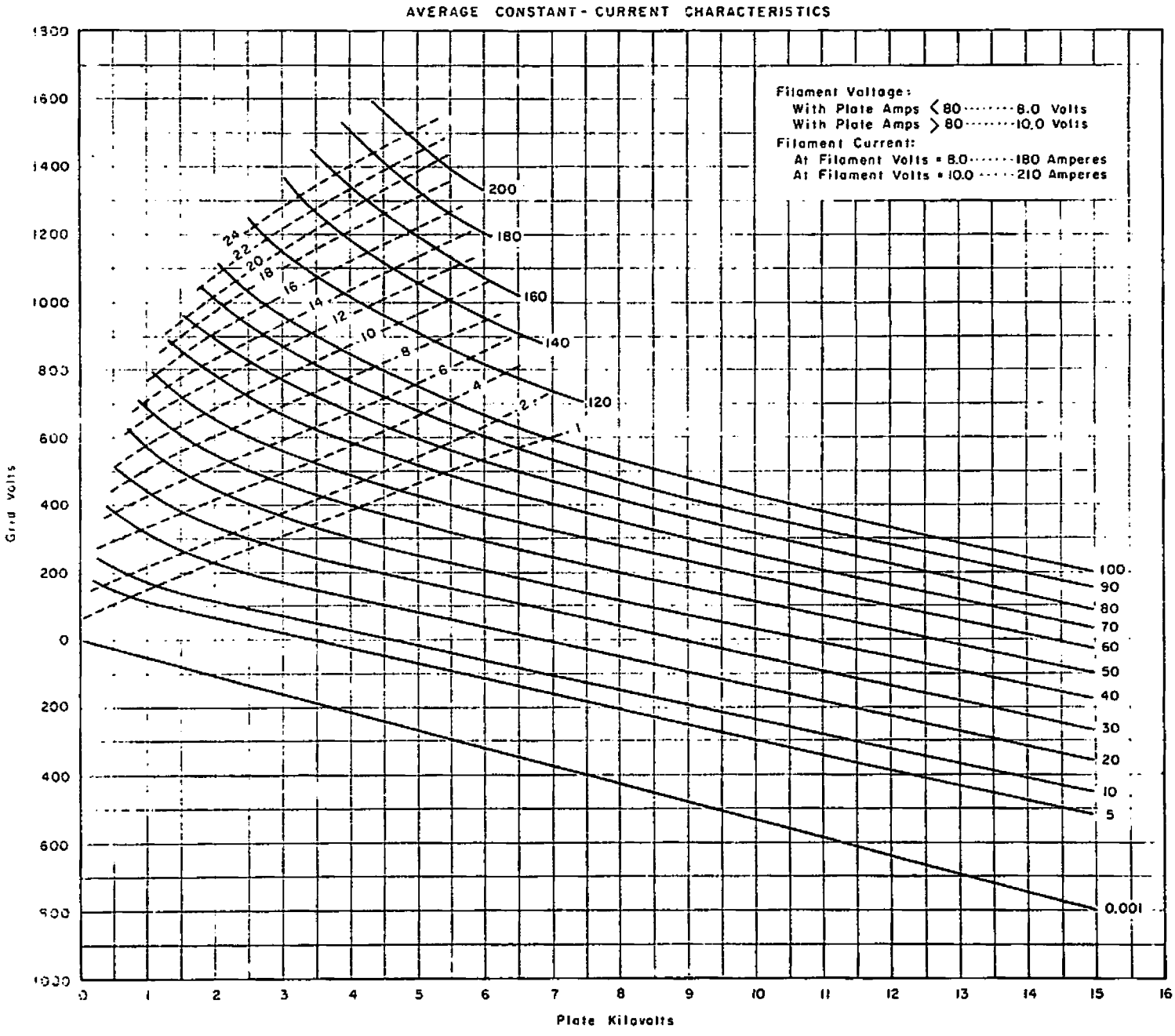
AVERAGE CONSTANT-CURRENT CHARACTERISTICS
Filament Voltage:
With Plate Amps < 80 ····· 8.0 Volts
With Plate Amps > 80 ····· 10.0 Volts
Filament Current:
At Filament Volts = 8.0 ····· 180 Amperes
At Filament Volts = 10.0 ····· 210 Amperes
Grid Volts
Plate Kilovolts
1800
1600
1400
1200
1000
800
600
400
200
0
200
400
600
800
1000
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
200
180
160
140
120
24
22
20
18
16
14
12
10
8
6
4
2
1
100
90
80
70
60
50
40
30
20
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