

## HARD TUBE PULSE MODULATOR TYPE 8044

The 8044 is a three electrode tube designed for service as a hard tube modulator. The forced air cooled anode is capable of dissipating 20 kilowatts. The cathode is a single phase thoriated tungsten filament.

### ELECTRICAL:

Cathode.....	Thoriated Tungsten Filament		
Filament:			
Voltage (d-c single phase a-c).....	8	Volts	
Current.....	185	Amperes	
Heating Time (minimum).....	15	Seconds	
Amplification Factor.....	20		
Direct Interelectrode Capacitances:			
Grid to Plate.....	79	$\mu\text{pf}$	
Grid to Filament.....	71	$\mu\text{pf}$	
Plate to Filament.....	4	$\mu\text{pf}$	

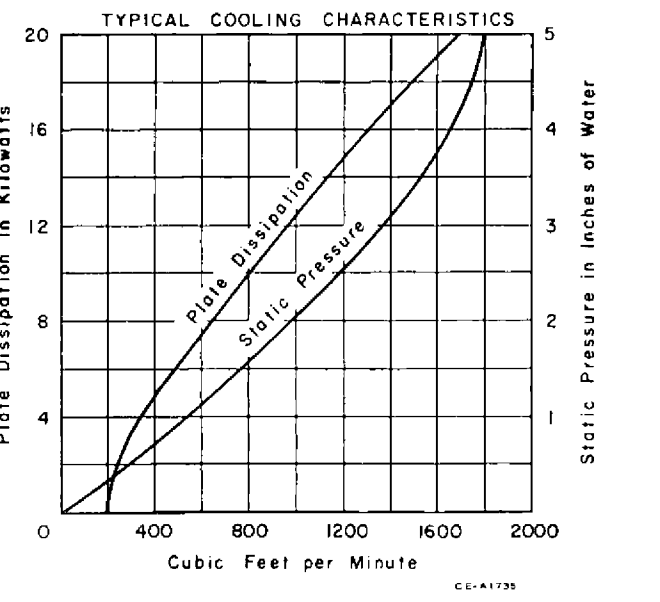
### MAXIMUM RATINGS:

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.....	25	max.	Amperes
Plate Dissipation.....	20	max.	Kilowatts
Grid Dissipation.....	800	max.	Watts
Pulse Length.....	1000	max.	Microseconds
Duty Factor.....	0.02	max.	
Peak Pulse Cathode Current			
(Note 1).....	105	max.	Amperes

### MECHANICAL:

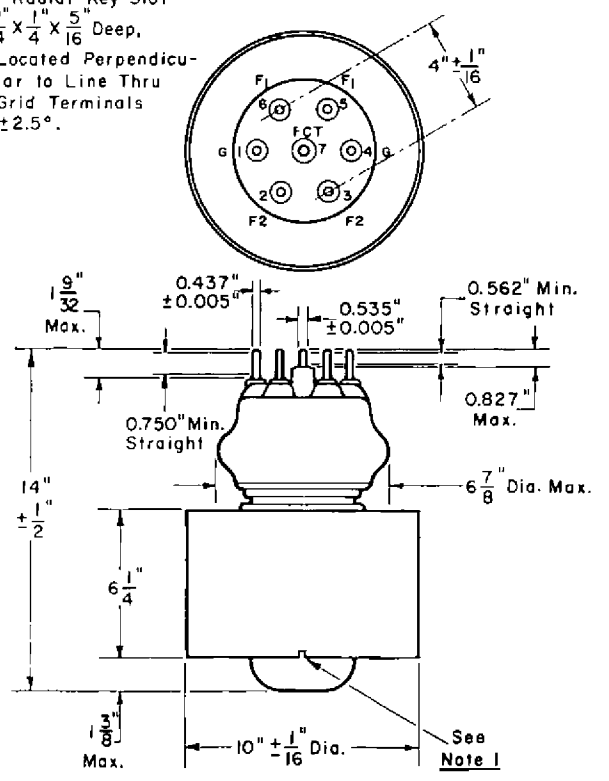
Mounting Position.....	Vertical, Anode Down
Type of Cooling.....	Forced Air
Required Air Flow Through Radiator:	
Plate Dissipation.....	10 20 Kilowatts
Air Flow.....	800 1700 CFM
Static Back Pressure (Max.).....	2.0 4.5 In. H <sub>2</sub> O
Maximum Bulb Temperature.....	180 °C
Net Weight.....	72 Pounds

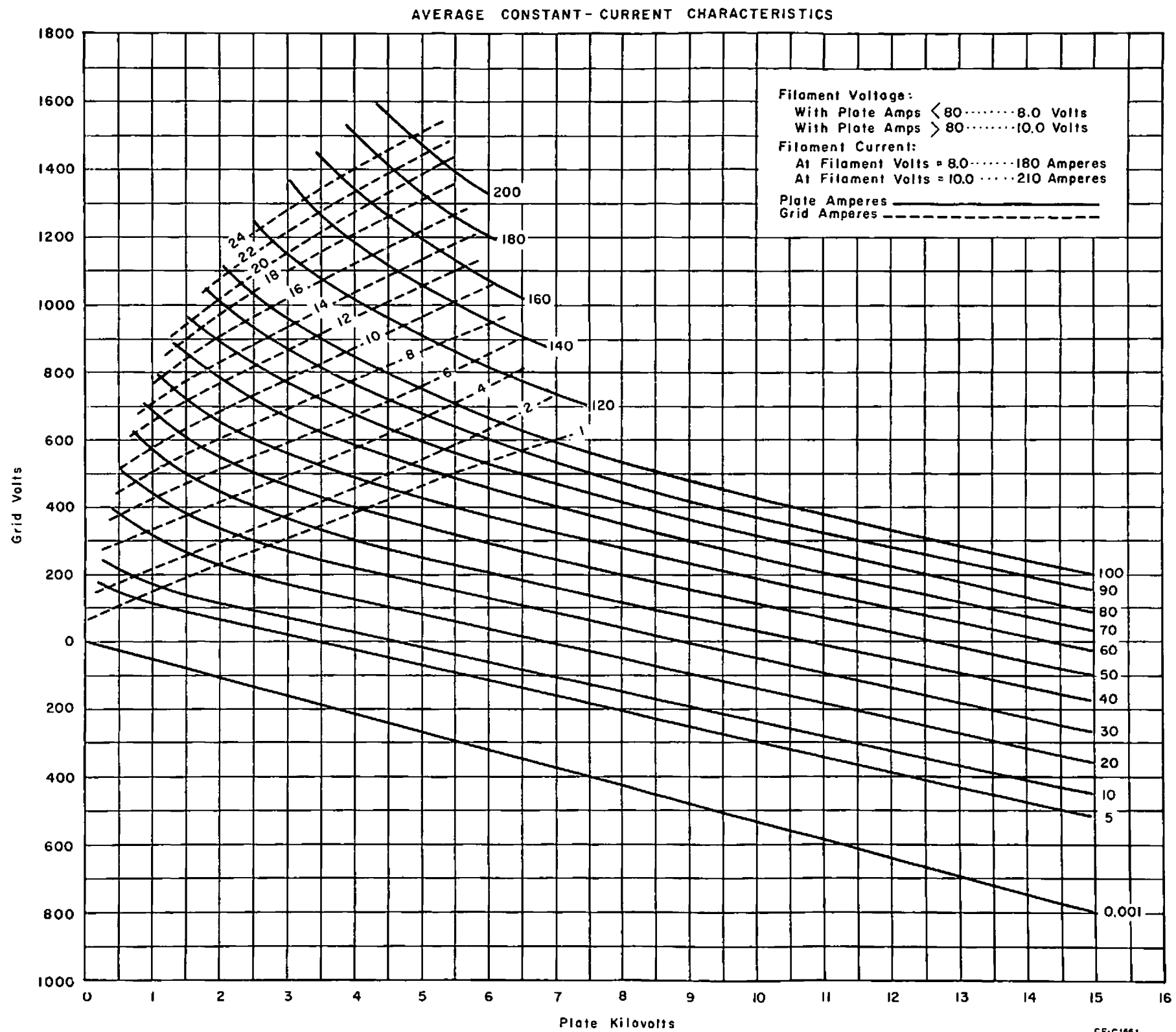
1. Peak pulse cathode current of 200 amperes is allowable on pulses of 10 microseconds or less duration if filament is elevated to 10.0 volts.

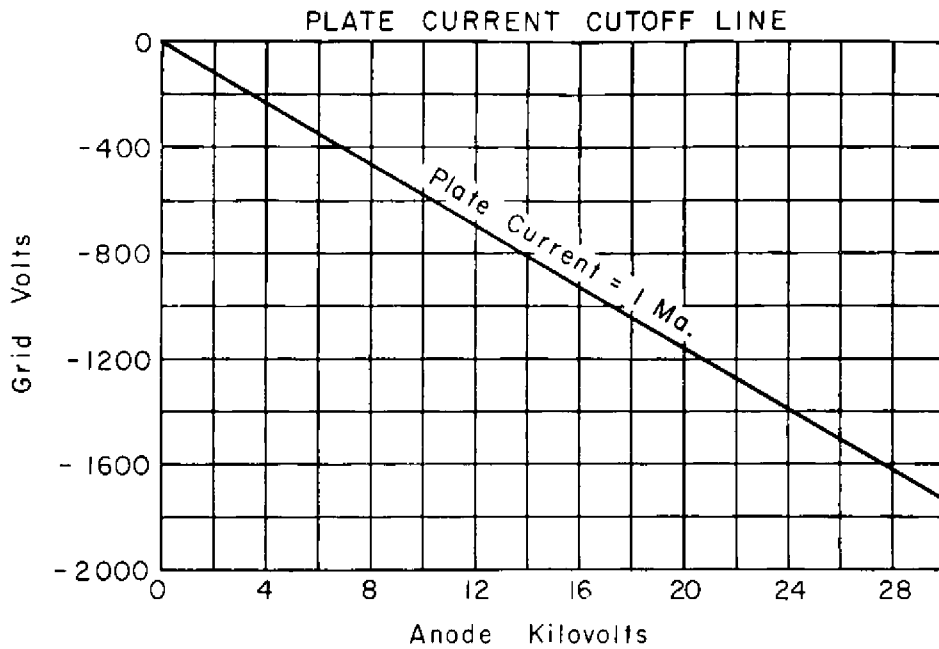


### Note 1:

Radial Key Slot  
 $\frac{1}{4} \times \frac{1}{4} \times \frac{5}{16}$  Deep,  
 Located Perpendicular to Line Thru Grid Terminals  $\pm 2.5^\circ$ .







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