

March 1, 1961

LOW MU POWER TRIODE TYPE 7328A

The 7328A is a three element tube designed for service as a modulator or AF amplifier. Electrical characteristics make it particularly suitable for Class AB₁ or AB₂ circuits. The anode is capable of dissipating 20 KW CCS with forced air cooling. The cathode is a single phase, thoriated tungsten filament.

ELECTRICAL:

Cathode	Thoriated Tungsten Filament
Filament:	
Voltage	7.0 Volts
Current	245 Amperes
Starting Current (max.)	1000 Amperes
Amplification Factor: Grid Volts = -450,	
Plate Amperes = 5.0	6
Maximum Usable Cathode Current	60 Amperes
Direct Interelectrode Capacitances:	
Grid to Plate	78 $\mu\mu\text{f}$
Grid to Filament	68 $\mu\mu\text{f}$
Plate to Filament	7 $\mu\mu\text{f}$

MECHANICAL:

Mounting Position	Vertical, Anode Down
Cooling:	
Type	Forced Air
Amount Required:	
Plate Dissipation	10 15 20 Kilowatts
Air Flow	800 1250 1700 CFM
Static Pressure	2.0 3.5 6.0 In. H ₂ O
Maximum Incoming Air Temperature	45 °C
Maximum Seal Temperature	180 °C
Net Weight	72 Pounds

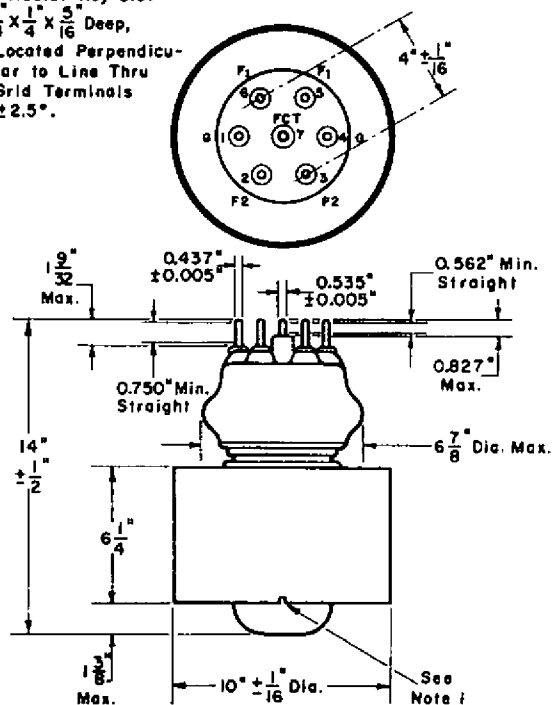
MAXIMUM RATINGS:

Absolute Maximum Values			
DC Plate Voltage	10	max.	Kilovolts
DC Plate Current	10	max.	Amperes
Plate Power Input (Note 1)	50	max.	Kilowatts
Plate Dissipation (Note 1)	20	max.	Kilowatts
Grid Dissipation	300	Max.	Watts
	800		

TYPICAL OPERATING CHARACTERISTICS:

(Values for Two Tubes)				
AF Power Amplifier & Modulator Service				
Class AB ₁ Operation				
DC Plate Voltage	8	9	10	Kilovolts
DC Grid Voltage	-1700	-1900	-2200	Volts
Peak AF Grid-to-Grid Voltage ..	3350	3750	4350	Volts
Zero Signal DC Plate Current ..	0.5	0.5	0.5	Amperes
Maximum Signal DC Plate Current	6.4	7.4	8.2	Amperes
Effective Plate-to-Plate Load Impedance	2400	2400	2400	Ohms
Driving Power	0	0	0	Watts
Maximum Signal Power Output ..	30	39.5	49.5	Kilowatts
Class AB ₂ Operation				
DC Plate Voltage	8	9	10	Kilovolts
DC Grid Voltage	-1700	-1900	-2200	Volts
Peak AF Grid-to-Grid Voltage ..	3700	4100	4700	Volts
Zero Signal DC Plate Current ..	0.5	0.5	0.5	Amperes
Maximum Signal DC Plate Current	7.4	8.4	9.3	Amperes
Effective Plate-to-Plate Load Impedance	2400	2400	2400	Ohms
Driving Power	50	55	61	Watts
Maximum Signal Power Output ..	40	51	65	Kilowatts

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



High Vacuum Amplifier Section

WESTINGHOUSE ELECTRIC CORPORATION, ELECTRONIC TUBE DIVISION, ELMIRA, NEW YORK

PULSE SERVICE

MAXIMUM RATINGS:

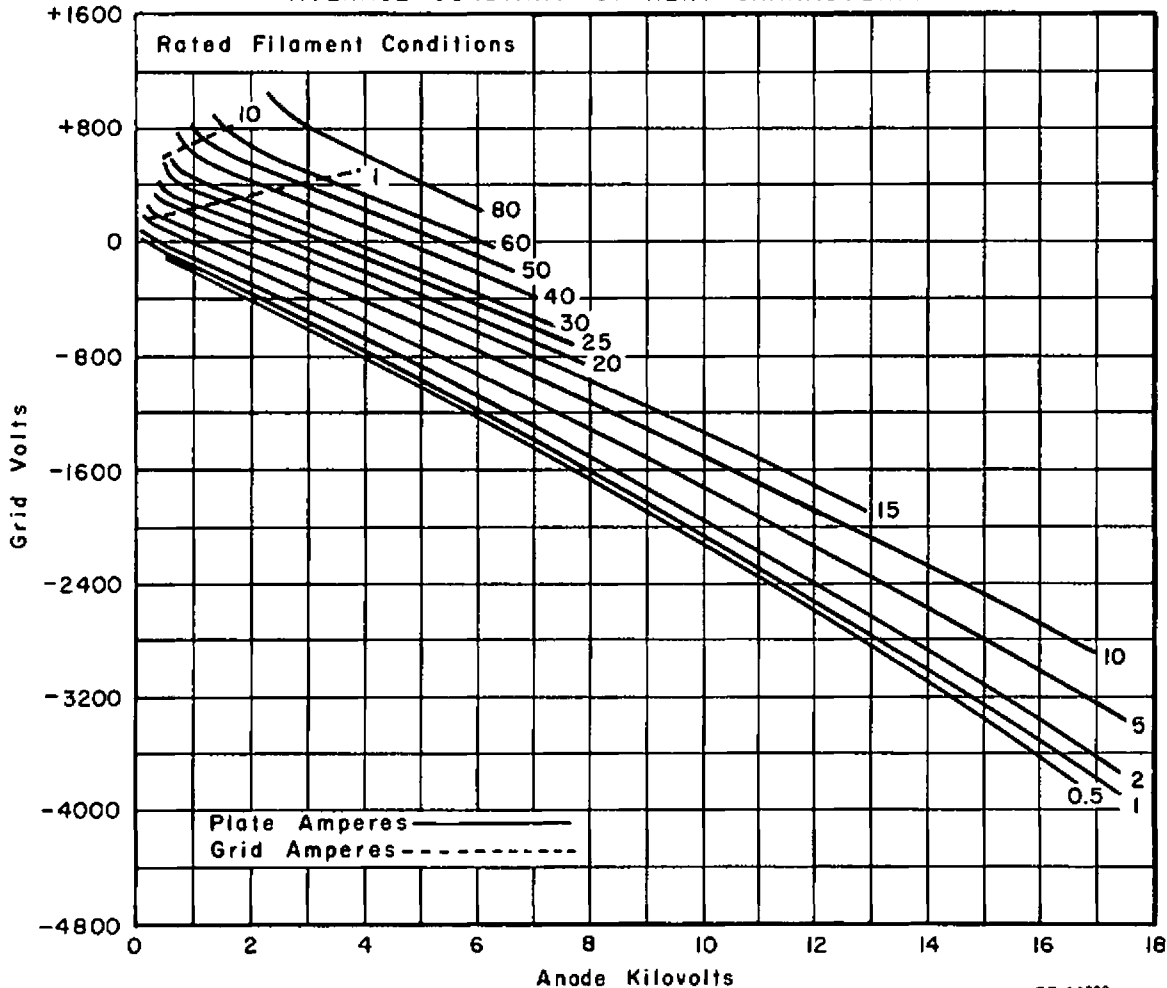
Absolute Maximum Values

DC Plate Voltage	20	max.	Kilovolts
DC Grid Voltage	-6000	max.	Volts
Peak Positive Grid Voltage	2500	max.	Volts
Peak Pulse Plate Current	88	max.	Amperes
Peak Pulse Grid Current	12	max.	Amperes
Plate Dissipation	800	20 max.	Kilowatts
Grid Dissipation	300	max.	Watts
Pulse Length	2000	max.	μ seconds
Duty Factor	0.01	max.	
Peak Pulse Cathode Current (Note 2)	100	max.	Amperes

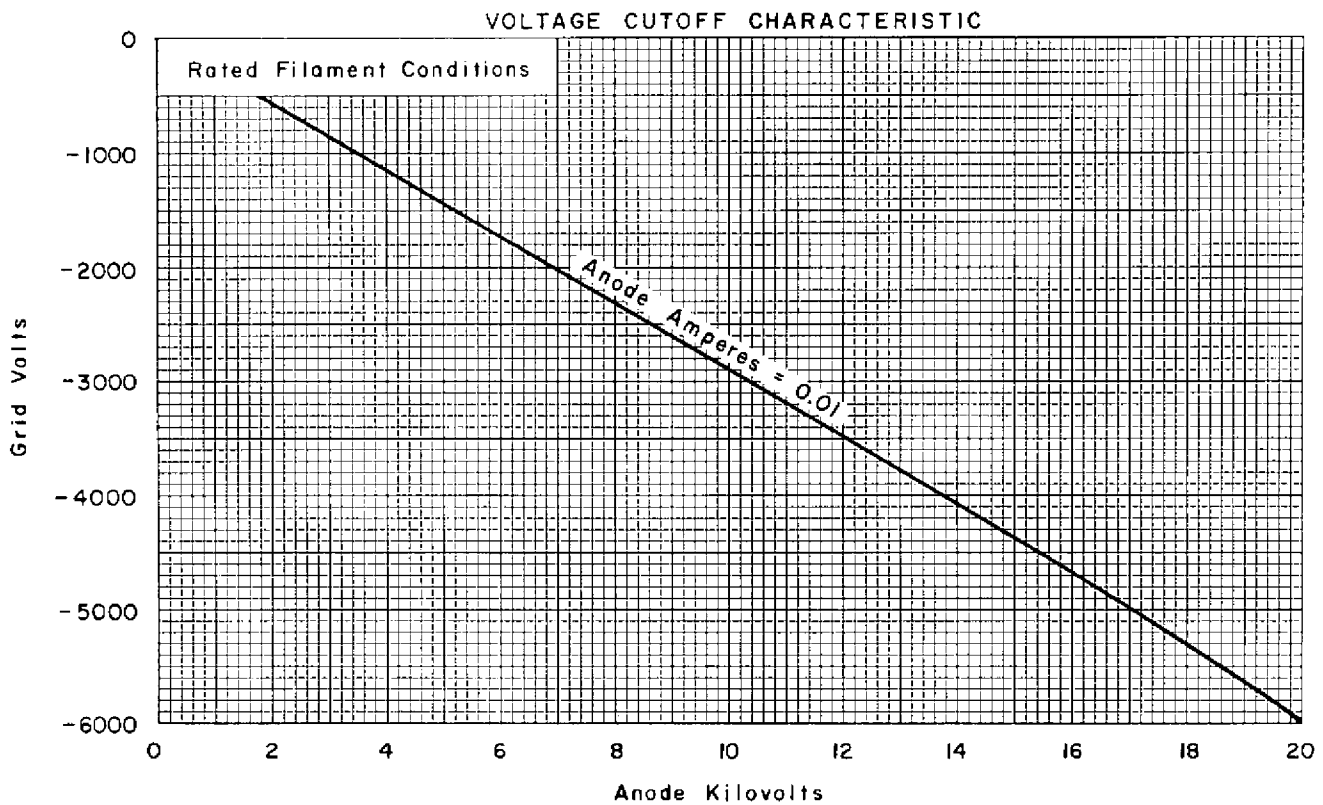
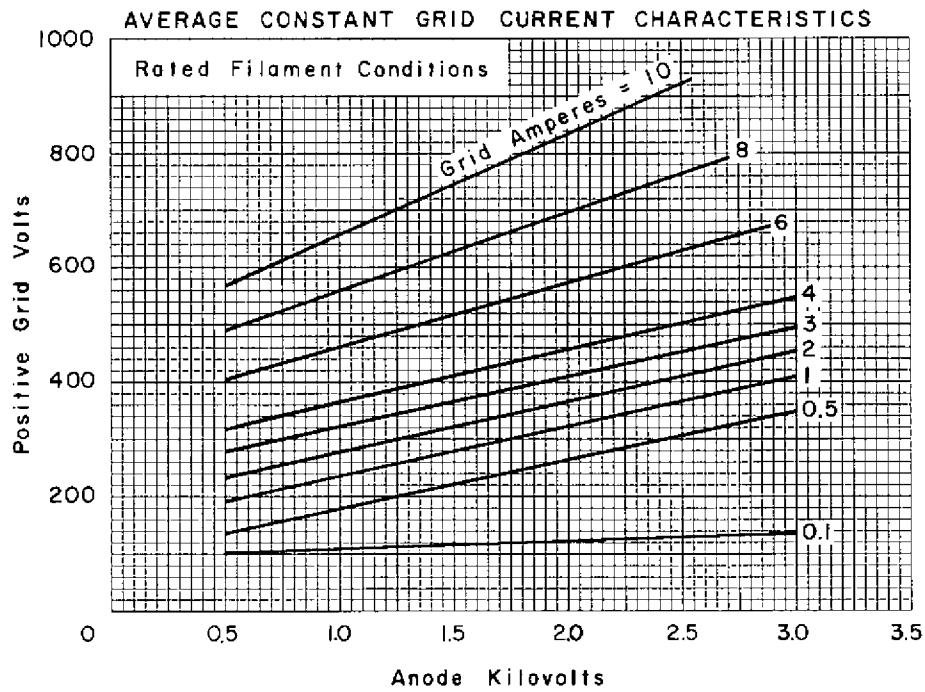
X-Ray Warning: The Maximum Ratings of the 7328A permit operation at voltages in excess of 16 KV. Therefore equipment design considerations should include the possible generation of soft x-rays.

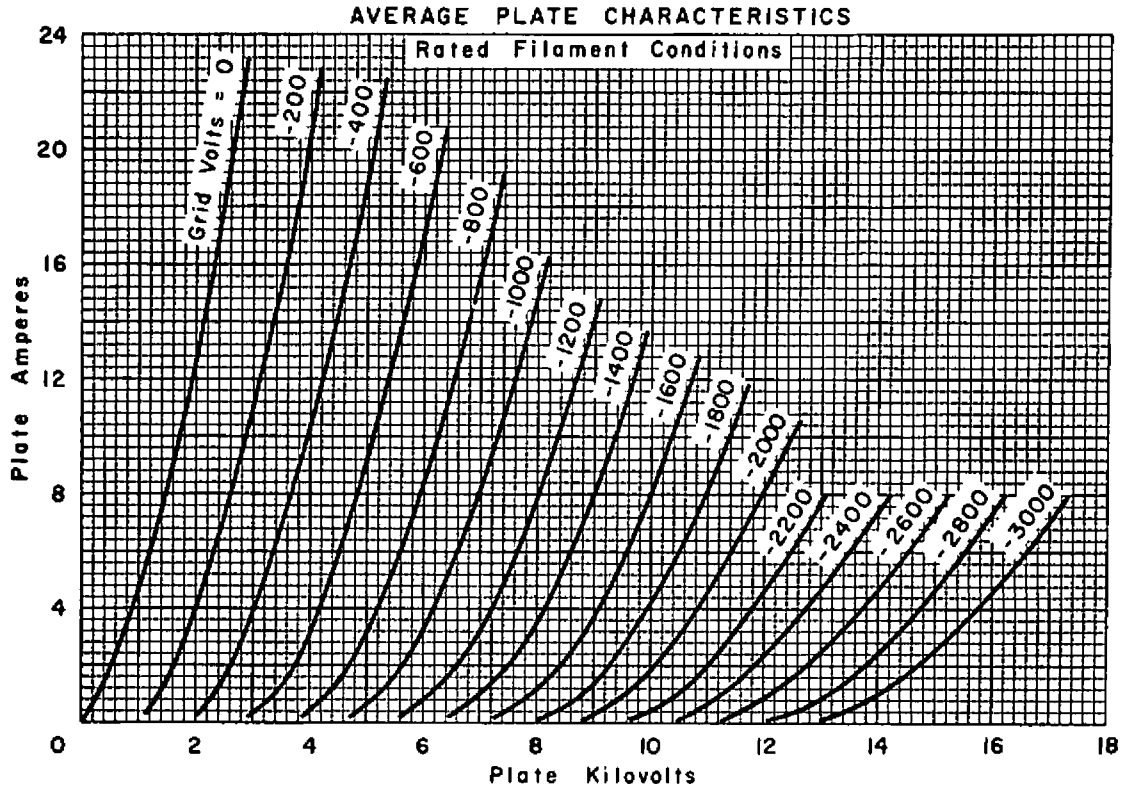
1. Averaged over any AF cycle of sine wave form.
2. A maximum of 160 amperes is permitted with 7.6 volts applied to filament. Continuous operation at elevated filament temperature will reduce length of service received.

AVERAGE CONSTANT CURRENT CHARACTERISTICS



CE-A1698





CE-A1846