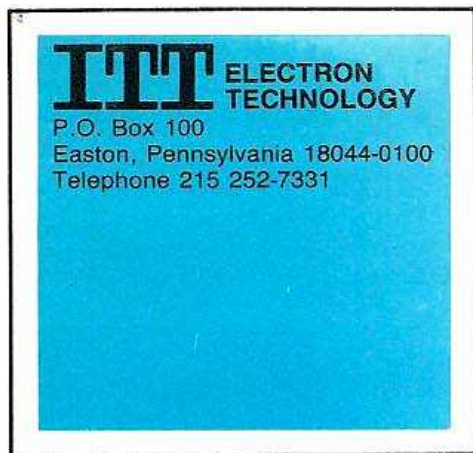




F-7207A

POWER TRIODE

DESCRIPTION

The F-7207A is a three electrode tube designed for use as a modulator; its electrical characteristics making it particularly suitable for Class AB modulator circuits. The anode is forced air-cooled and capable of dissipating 17 kilowatts. The cathode is a thoriated tungsten filament. Maximum ratings apply for audio-frequency use only.

ELECTRICAL

Filament Voltage	7.0	Volts
Filament Current	110	Amperes
Amplification Factor		
$E_c = -200V$; $I_b = 1.0$ amperes	6	
Direct Interelectrode Capacitance		
• Grid-Plate	42	μf
Grid-Filament	43	μf
Plate-Filament	12	μf

MECHANICAL

Mounting Position	Vertical, Anode Down		
Type of Cooling	Forced Air		
Maximum Incoming Air Temperature	45 °C		
Required Air Flow on Anode			
Plate Dissipation	17	14	12 Kilowatts
Air Flow	1000	800	700 CFM
Pressure	3.5	2.3	1.7 " of Water
Maximum Glass Temperature	180 °C		
Net Weight (Approximate)	45 Pounds		

**Superseding F-7207

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONSAudio-Frequency Power Amplifier and Modulator - Class AB₁Maximum Ratings, Absolute Values

DC Plate Voltage	8	Kilovolts
Maximum Signal DC Plate Current*	5	Amperes
Maximum Signal Plate Input*	30	Kilowatts
Plate Dissipation*	17	Kilowatts
Grid Dissipation	.3	Kilowatts

*Averaged over any audio-frequency cycle of sine wave form.

Typical Operation

(Unless otherwise specified, values are for two tubes)

DC Plate Voltage	6600	7600	Volts
DC Grid Voltage	-1150	-1400	Volts
Peak A-F Grid-to-Grid Voltage	2200	2700	Volts
Zero Signal DC Plate Current	.5	.5	Amperes
Maximum Signal DC Plate Current	5.0	5.0	Amperes
Effective Load Resistance Plate-to-Plate	1910	2530	Ohms
Maximum Signal Driving Power	0	0	Watts
Maximum Signal Power Out	14.75	21	Kilowatts

Additional information for specific applications can be obtained from:

ITT ELECTRON TECHNOLOGY DIVISION
Applications Department
P.O. Box 100
Easton, Pennsylvania 18044-0100

