Electronic TUBE
KEN-RAD

70L7-GT

Description and Rating

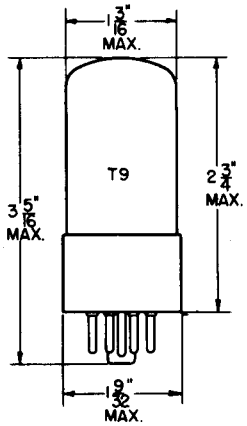
RECTIFIER-BEAM POWER AMPLIFIER

GENERAL DESCRIPTION

Principal Application: The 70L7-GT is a glass type tube containing a half-wave rectifier and a beam power amplifier in the same envelope. The 70L7-GT is intended for use as the power rectifier and power amplifier tube in circuits requiring series heater operation.

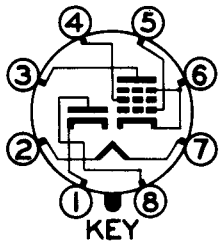
Cathode:	Coated Unipotential	
Heater Voltage (A-C or D-C)	70.0	Volts
Heater Current	0.15	Ampere
Envelope:	T-9 Glass	
Base:	B8-6 Intermediate Shell Octal 8-Pin, Phenolic	
Mounting Position:	Any	

PHYSICAL DIMENSIONS



RMA 9-11

BASING DIAGRAM



RMA 8AA

BOTTOM VIEW

TERMINAL CONNECTIONS

Pin 1 - Rectifier Cathode
Pin 2 - Heater
Pin 3 - Amplifier Plate
Pin 4 - Amplifier Screen
Pin 5 - Amplifier Grid
Pin 6 - Amplifier Cathode
Pin 7 - Heater
Pin 8 - Rectifier Plate

MAXIMUM RATINGS

AMPLIFIER UNIT	Design Center	Absolute	
Plate Voltage	117	129	Volts
Screen Voltage	117	129	Volts
Plate Dissipation	5.0	5.5	Watts
Screen Dissipation	1.0	1.1	Watts

CHARACTERISTICS AND TYPICAL OPERATION

CLASS A1 AMPLIFIER		
Plate Voltage	110	Volts
Screen Voltage	110	Volts
Grid Voltage*	-7.5	Volts
Peak A-F Grid Voltage	7.5	Volts
Zero-Signal Plate Current	40	Milliamperes
Zero-Signal Screen Current (Approximate)	3	Milliamperes
Maximum-Signal Plate Current	43	Milliamperes

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Maximum-Signal Screen Current (Approximate)	6	Milliamperes
Plate Resistance	15000	Ohms
Transconductance	7500	Micromhos
Load Resistance	2000	Ohms
Total Harmonic Distortion	10	Per Cent
Maximum-Signal Power Output	1.8	Watts

RATINGS AND CHARACTERISTICS

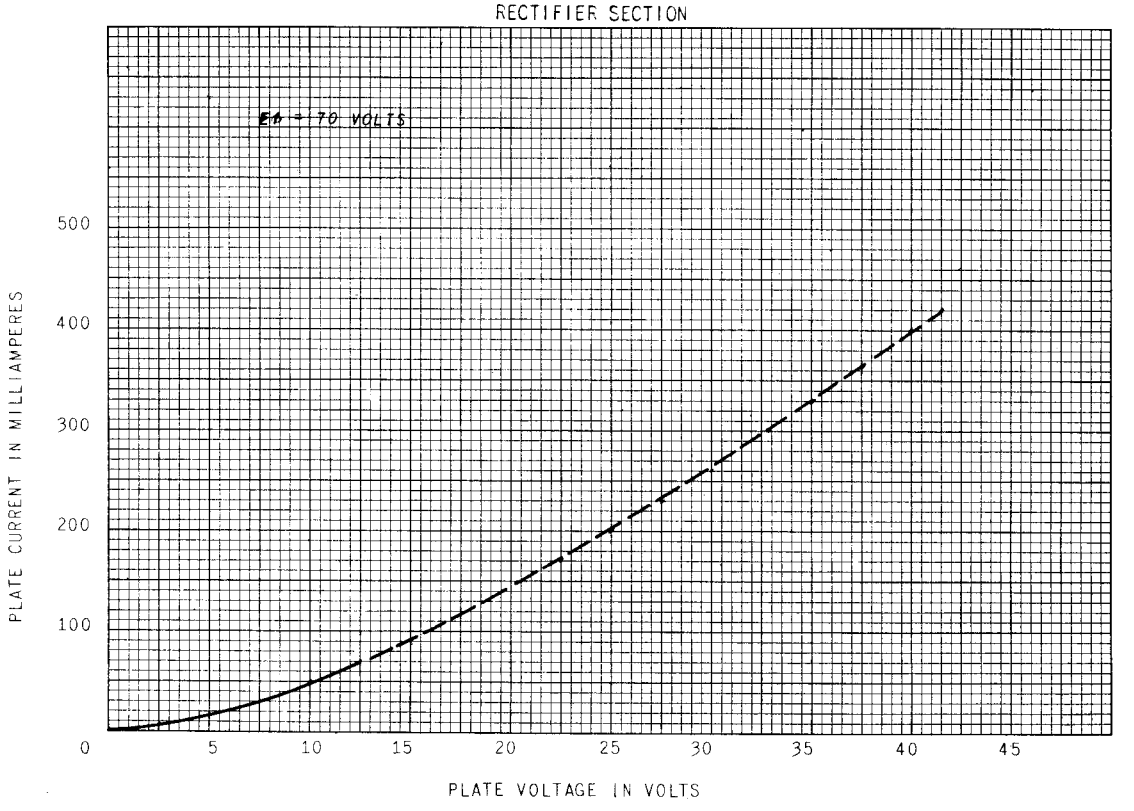
RECTIFIER UNIT

	Design Center	Absolute	
Maximum Peak Inverse Plate Voltage	350	385	Volts
Maximum Peak Plate Current	420	462	Milliamperes
Maximum D-C Heater-Cathode Voltage	175	193	Volts
Maximum A-C Plate Voltage (RMS)	117	129	Volts
Minimum Total Effective Plate-Supply Impedance#	15	17	Ohms
Maximum D-C Output Current	70	77	Milliamperes

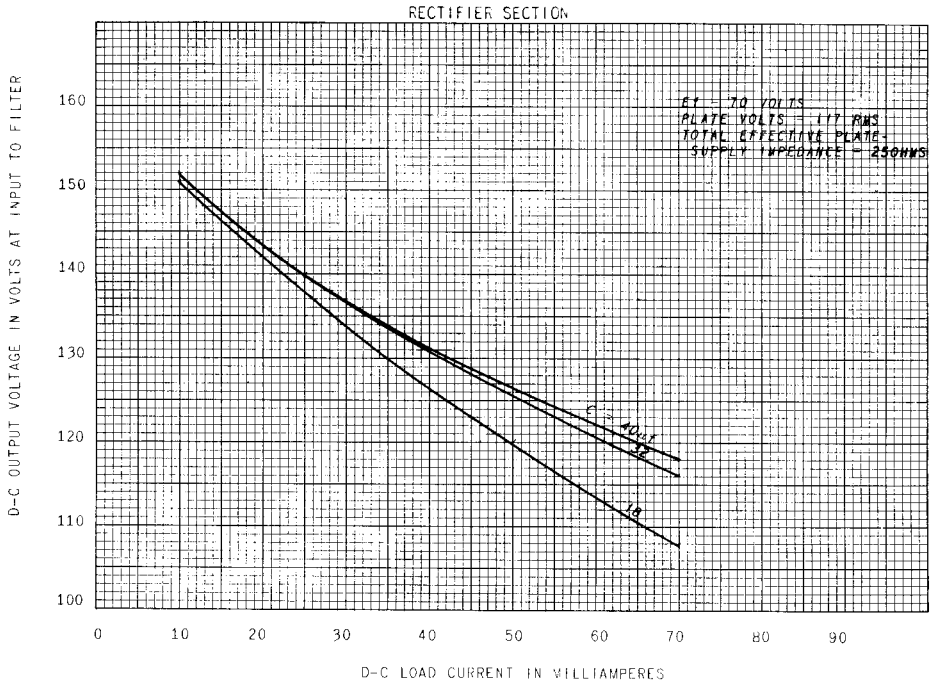
* *The type of input coupling used should not introduce too much resistance in the grid circuit. Transformer-or impedance-coupling devices are recommended. When the grid circuit has a resistance not higher than 0.1 megohm, fixed bias may be used; for higher values, cathode bias is required. With cathode bias, the grid circuit may have a resistance not higher than 0.5 megohm.*

\# *When a filter-input capacitor larger than 40 microfarads is used, it may be necessary to use more plate-supply impedance than the minimum value shown to limit the peak plate current to the rated value.*

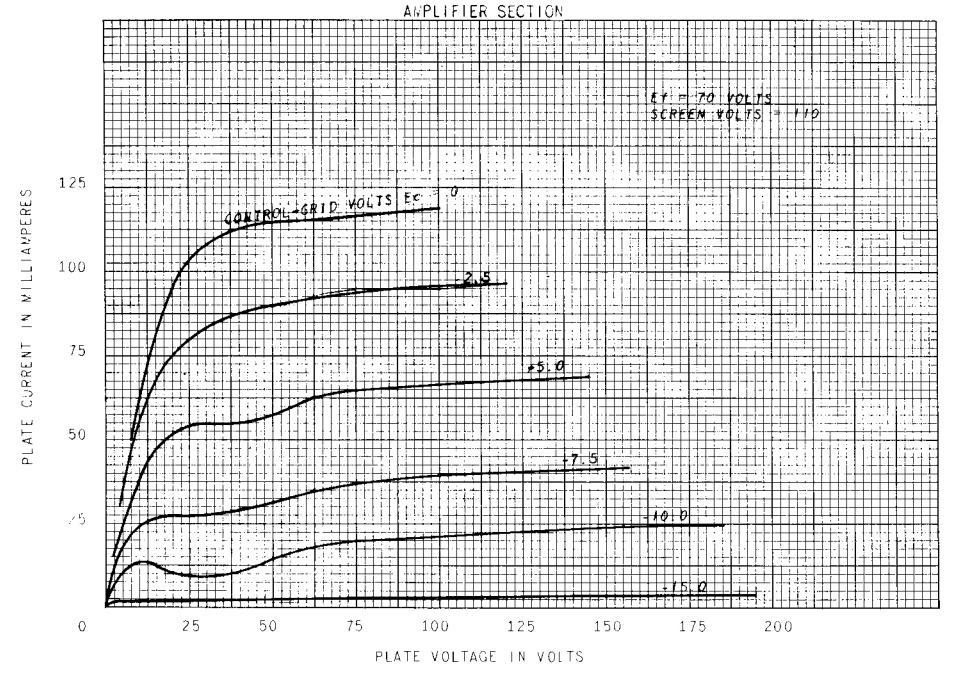
AVERAGE PLATE CHARACTERISTICS



OPERATION CHARACTERISTICS

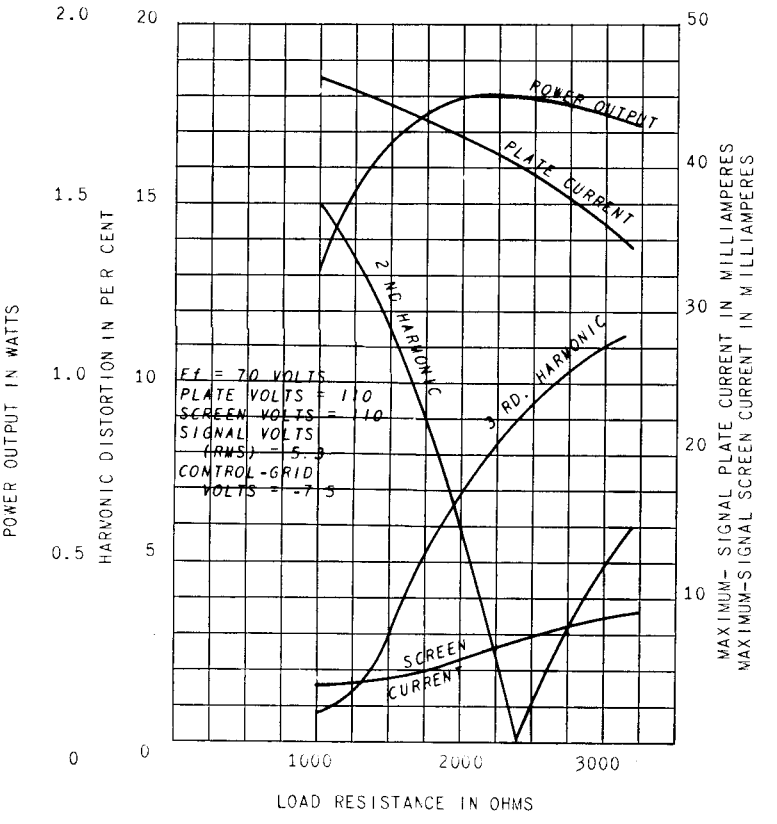


AVERAGE PLATE CHARACTERISTICS



OPERATION CHARACTERISTICS

AMPLIFIER SECTION



Electronics Department

GENERAL ELECTRIC

Schenectady, N. Y.