The 9T9 design utilizes a T-9 (1⅛" Dia.) bulb based to fit a standard 9-pin miniature socket. Advantages of the 9T9 include an increase in the heat dissipation safety margin, as compared to 9-pin miniature tubes employing T-6½ (13/16" Dia.) bulbs.

MECHANICAL DATA

Bulb	Special, T-9
Base	9-Pin, Same as E9-1, except Bulb Diameter
Outline	See Drawing
Basing	9MQ
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS	7754	7695		
Heater Voltage	6.3	50	Volts	
Heater Current[1]	1200	150	Ma	
Heater-Cathode Voltage (Design Maximum Values)				
Heater Negative with Respect to Cathode				
Total DC and Peak	200	200	Volts	Max.
Heater Positive with Respect to Cathode				
DC	100	100	Volts	Max.
Total DC and Peak	200	200	Volts	Max.

DIRECT INTERELECTRODE CAPACITANCES (Approx.)		
Grid No. 1 to Plate	0.75	μμf
Input: g1 to (h+k, g3+g2)	14	μμf
Output: p to (h+k, g3+g2)	9	μμf

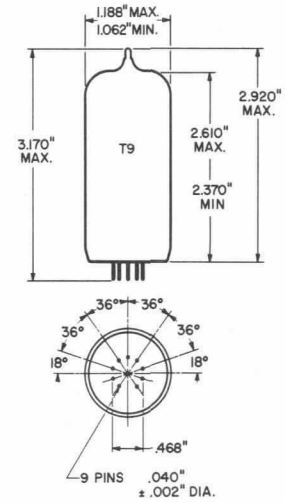
RATINGS (Design Maximum Values)			
Plate Voltage	150	Volts	Max.
Grid No. 2 Voltage	150	Volts	Max.
Plate Dissipation	16	Watts	Max.
Grid No. 2 Dissipation	2.5	Watts	Max.
Grid No. 1 Circuit Resistance			
Fixed Bias	0.1	Megohm	Max.
Cathode Bias	0.5	Megohm	Max.

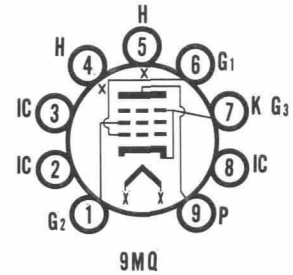
CHARACTERISTICS AND TYPICAL OPERATIONS

Class A1 Amplifier (Single Tube)			
Plate Voltage	130	140	Volts
Grid No. 2 Voltage	130	140	Volts
Grid No. 1 Voltage	−11	—	Volts
Cathode Resistor	—	100	Ohms
Peak AF Grid No. 1 Voltage	11	11.3	Volts
Zero Signal Plate Current	100	100	Ma
Max. Signal Plate Current	108	100	Ma
Zero Signal Grid No. 2 Current	5	5	Ma
Max. Signal Grid No. 2 Current	15	14	Ma
Transconductance	11,000	—	μmhos
Plate Resistance (Approx.)	7,000	—	Ohms
Load Resistance	1,100	1,100	Ohms
Max. Signal Power Output	4.5	4.5	Watts
Total Harmonic Distortion (Approx.)	11	11	Percent
Class AB1 Push-Pull Amplifier (Values are for two tubes)			
Plate Voltage	130	140	Volts
Grid No. 2 Voltage	130	140	Volts
Grid No. 1 Voltage	−12	—	Volts
Cathode Resistor	—	50	Ohms
Peak AF Grid No. 1 to Grid No. 1 Voltage	22.6	22.6	Volts
Zero Signal Plate Current	195	210	Ma
Max. Signal Plate Current	220	220	Ma
Zero Signal Grid No. 2 Current	9	9	Ma
Max. Signal Grid No. 2 Current	24	20	Ma
Load Resistance (P1 to P1)	1,800	1,500	Ohms
Maximum Signal Power Output	10	10	Watts
Total Harmonic Distortion (Approx.)	6.0	4.0	Percent

QUICK REFERENCE DATA

The Sylvania Types 7695 and 7754 are beam power pentodes featuring remarkably high power sensitivity as audio power amplifiers. In Class A1 operation, they can deliver 4.5 watts of power with a B+ voltage of only 130 volts. As a result, the 7695 and 7754 make possible economies in power supply requirements.





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AUGUST, 1960

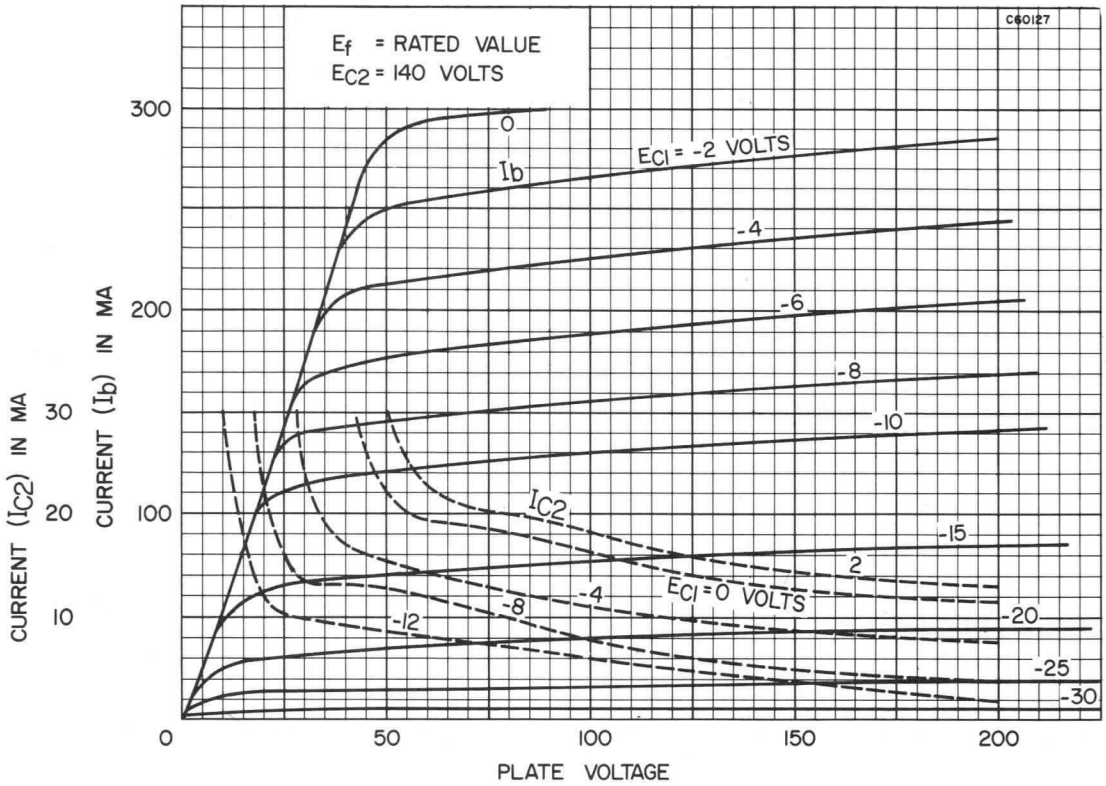
File Under
RECEIVING TUBES

SINGLE ENDED PUSH-PULL, CLASS A

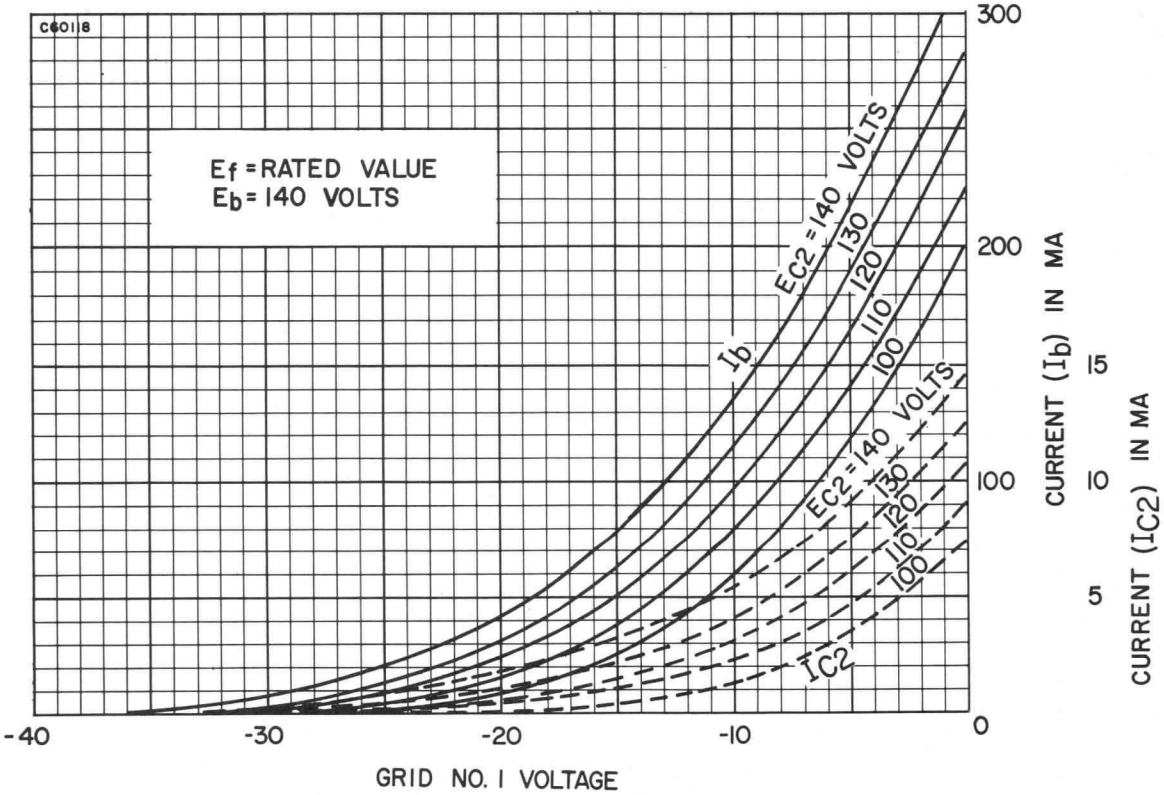
Transformerless Operation (See Circuit and Curve)

Supply Voltage	280 Volts
Plate Load Resistance	500 Ohms
Grid No. 2 Resistors (Rc2)	4000 Ohms
Peak AF Grid No. 1 Voltage	10.5 Volts
Power Output	5 Watts
Distortion	10 Percent

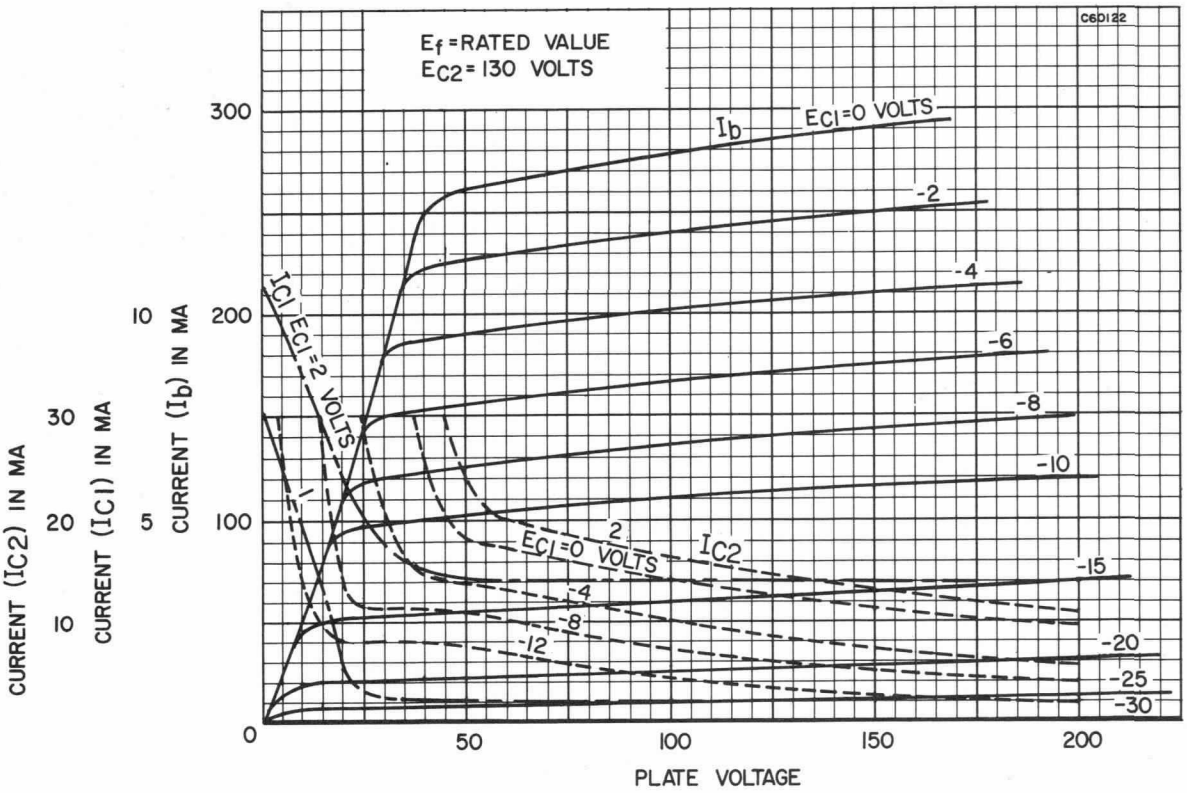
AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



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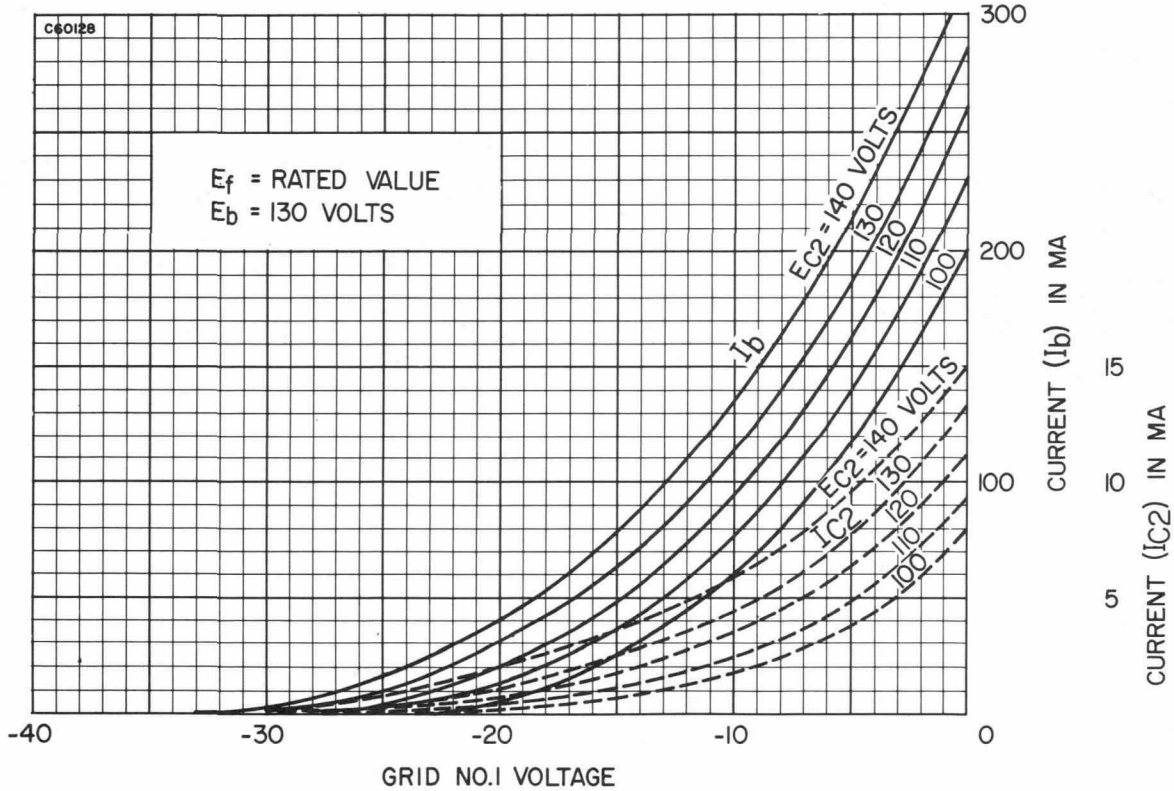
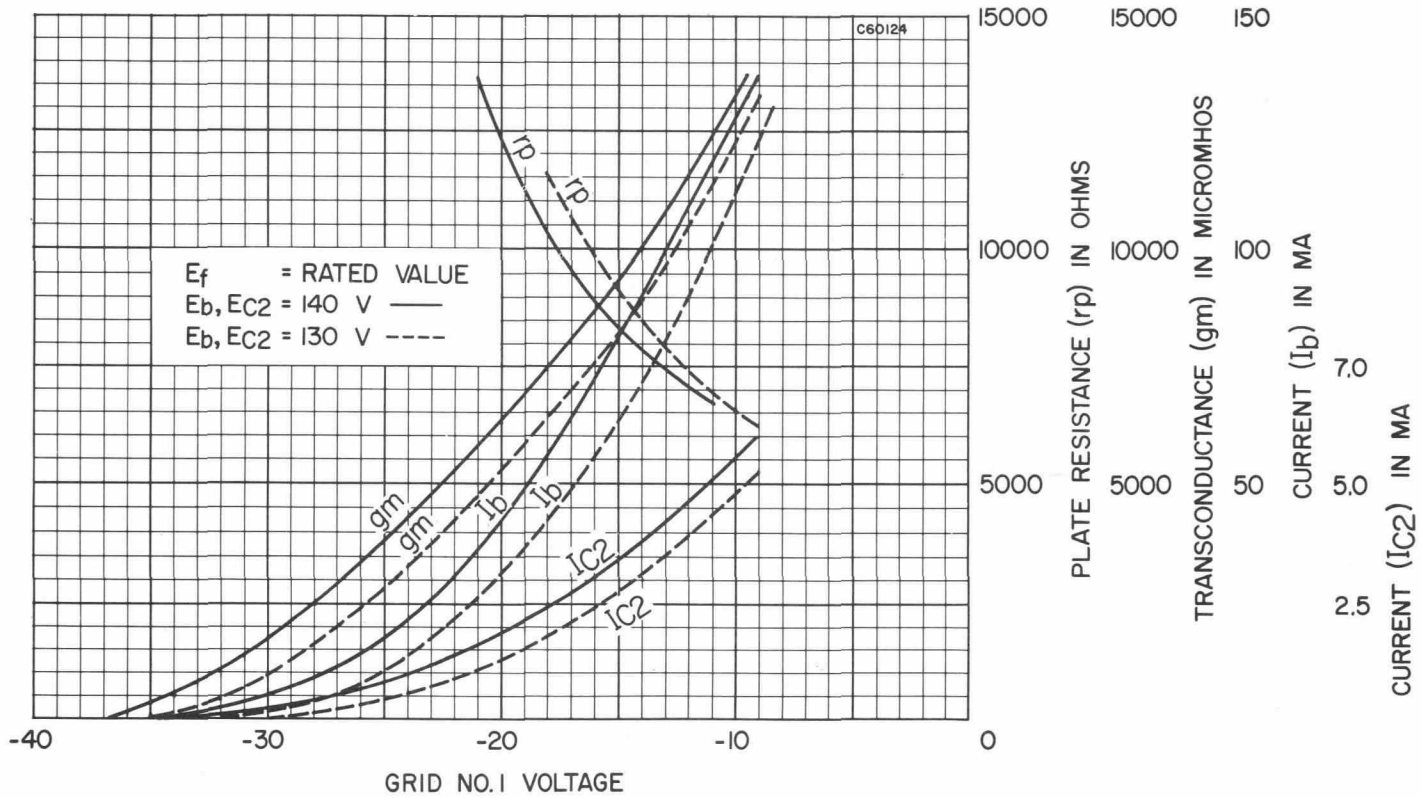
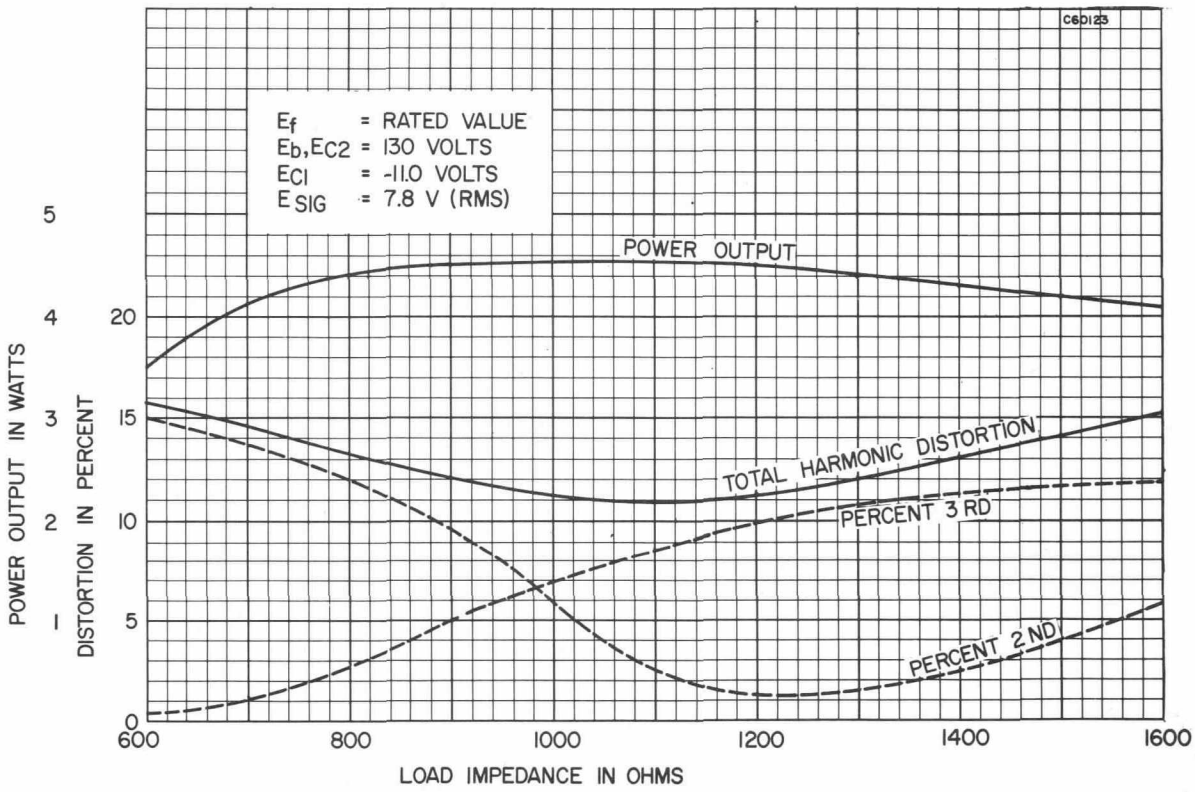


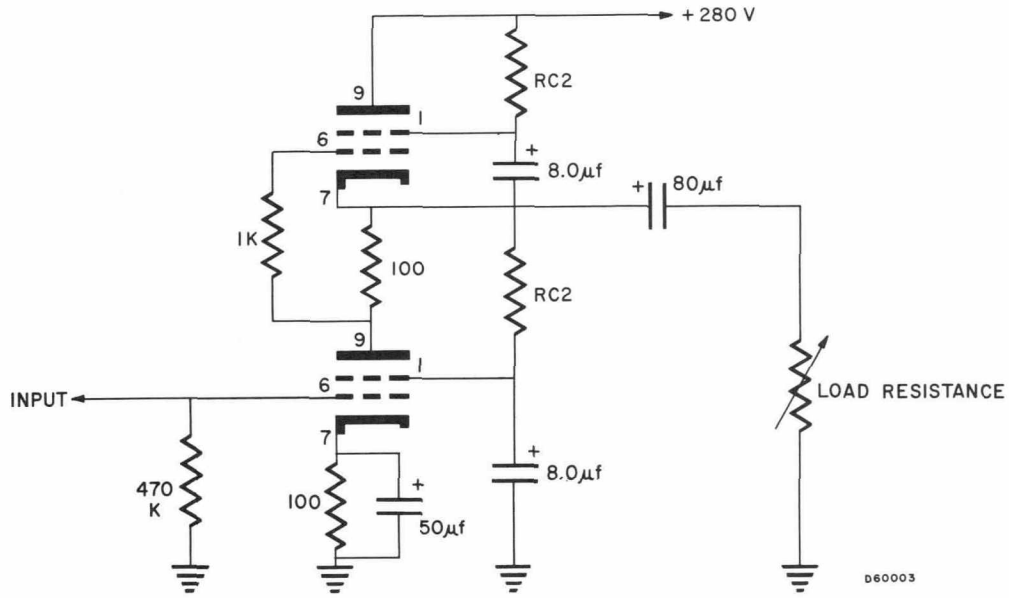
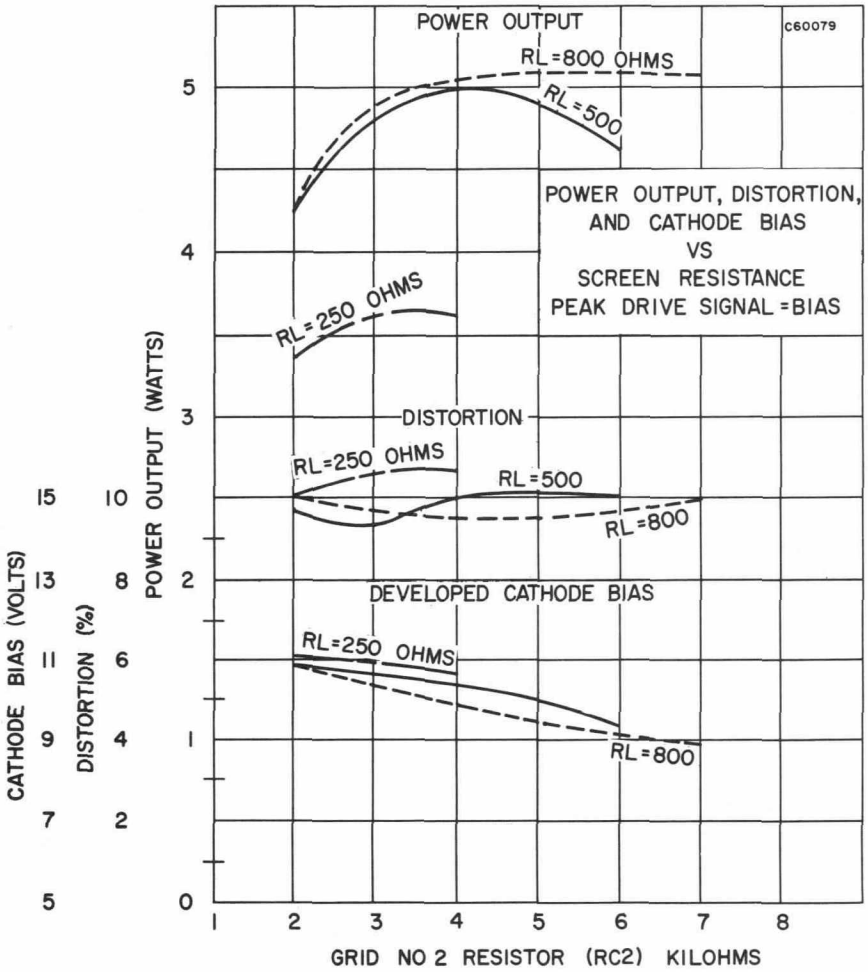
AVERAGE TRANSFER CHARACTERISTICS



AVERAGE OPERATION CHARACTERISTICS
(Class A1 Amplifier)



SINGLE ENDED PUSH-PULL CIRCUIT
(Transformerless)



SINGLE ENDED PUSH-PULL
(Transformerless Operation (See Circuit))