

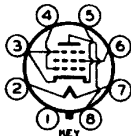


6SG7

### H-F AMPLIFIER PENTODE

SINGLE-ENDED METAL TYPE WITH SEMI-REMOTE CUT-OFF

Heater	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.3	amp.
Direct Interelectrode Capacitances: <sup>o</sup>		
Grid to Plate	0.003 max.	μf
Input	8.5	μf
Output	7.0	μf
Maximum Overall Length		2-5/8"
Maximum Seated Height		2-1/16"
Maximum Diameter		1-5/16"
Bulb		Metal Shell, MT-8
Base		Small Wafer Octal, 8-Pin
Pin 1 - Shell		Pin 5 - Cathode
Pin 2 - Heater		Pin 6 - Screen
Pin 3 - Cathode		Pin 7 - Heater
Pin 4 - Grid		Pin 8 - Plate
Mounting Position		Any



BOTTOM VIEW (8BK)

Maximum And Minimum Ratings Are Design-Center Values

#### AMPLIFIER

Plate Voltage	300 max. volts
Screen Voltage	200 max. volts
Screen Supply Voltage	300 max. volts
Grid Voltage	0 min. volts
Plate Dissipation	3 max. watts
Screen Dissipation	0.6 max. watt

*Typical Operation and Characteristics—Class A<sub>1</sub> Amplifier:*

Plate Voltage	100	250	250	volts
Screen Voltage	100	125	150	volts
Grid Voltage	-1	-1	-2.5	volts
Suppressor	Connected to pin #3 internally			
Plate Resistance (Approx.)	0.25	0.9	#	megohm
Transconductance	4100	4700	4000	μmhos
Grid Bias*	-11.5	-14	-17.5	volts
Plate Current	8.2	11.8	9.2	ma.
Screen Current	3.2	4.4	3.4	ma.

■ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

# Greater than 1 megohm.

\* Approximate, for transconductance of 40 micromhos.

o With shell connected to cathode.

← Indicates a change.

May 1, 1942

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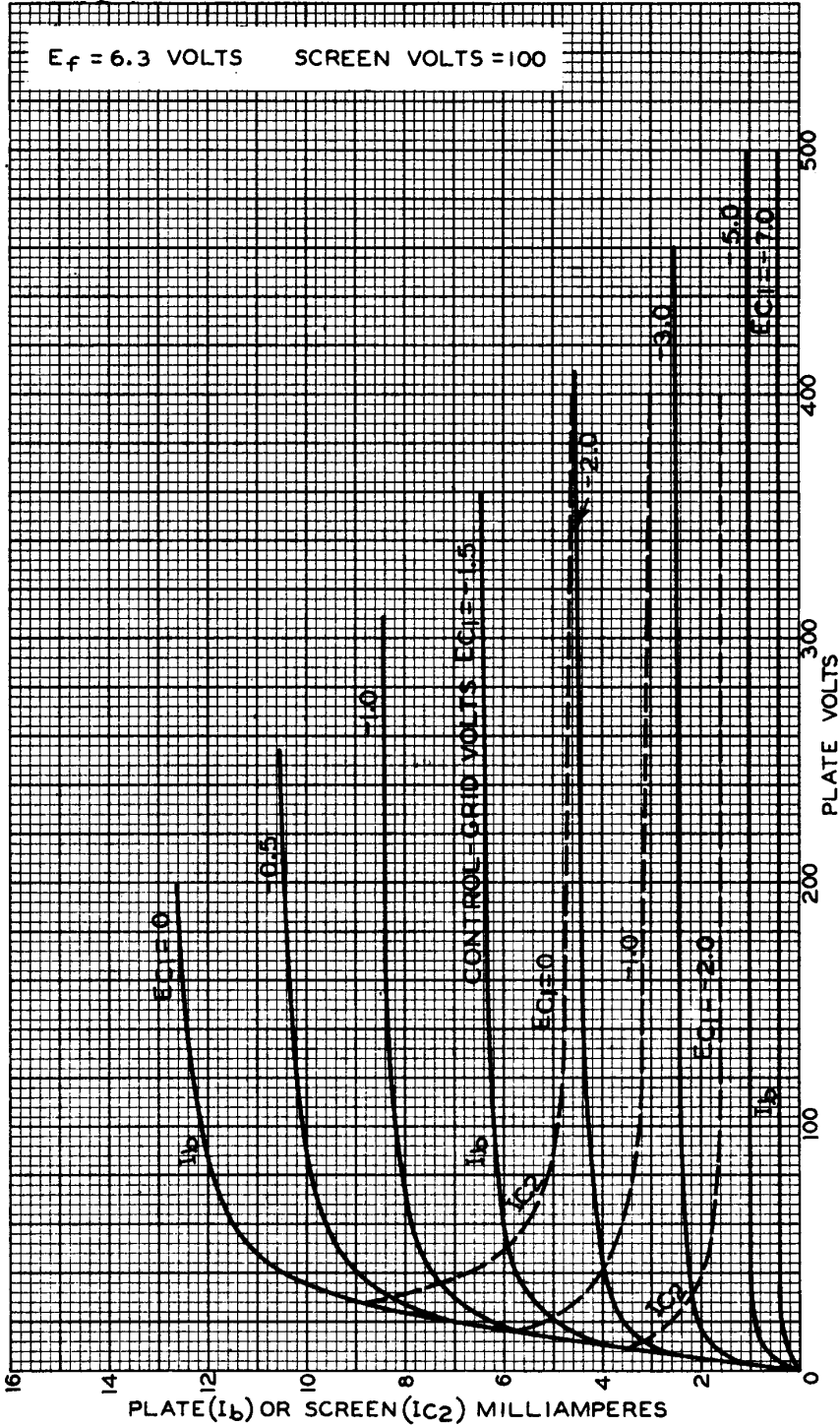
TENTATIVE DATA

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### AVERAGE PLATE CHARACTERISTICS



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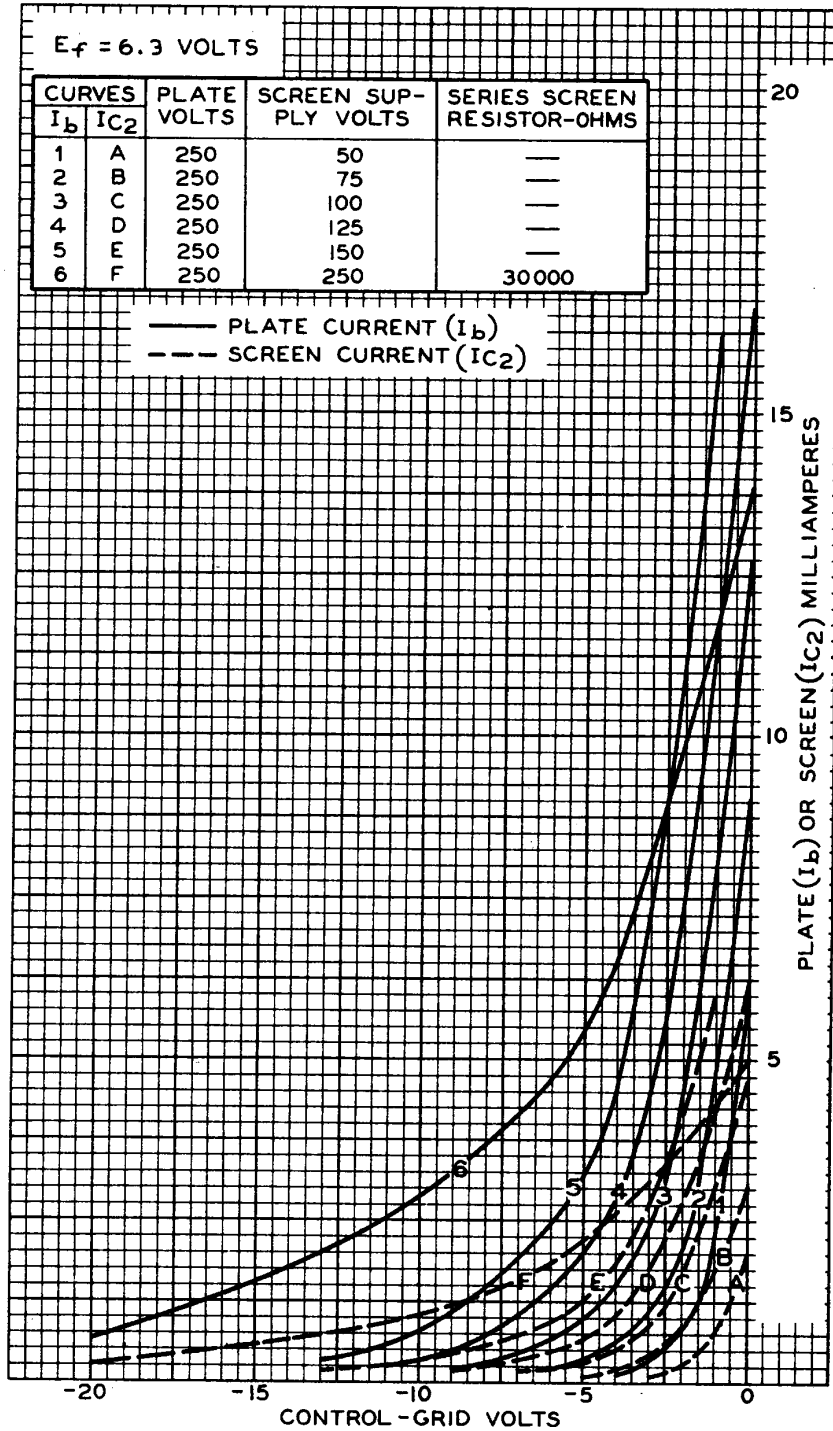
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### AVERAGE CHARACTERISTICS



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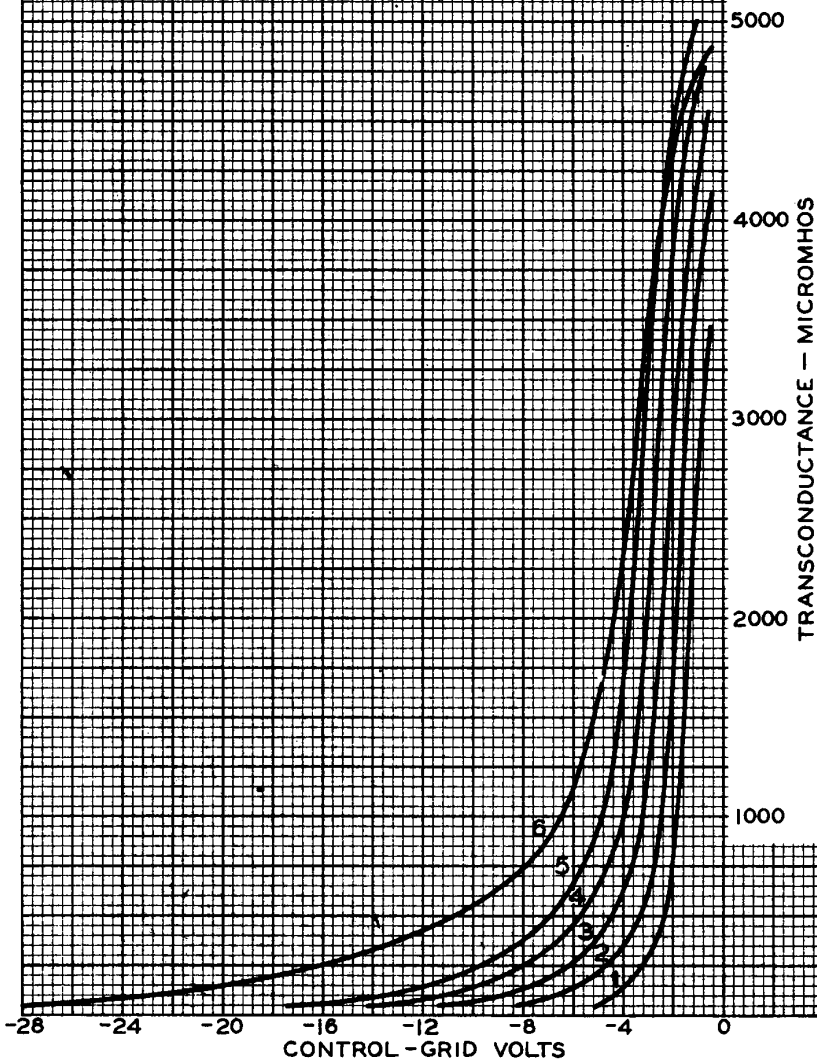


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AVERAGE CHARACTERISTICS

$E_f = 6.3$  VOLTS

CURVE	PLATE VOLTS	SCREEN SUPPLY VOLTS	SERIES SCREEN RESISTOR-OHMS
1	250	50	—
2	250	75	—
3	250	100	—
4	250	125	—
5	250	150	—
6	250	250	30000



APRIL 16, 1942

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