



6AB7/1853

6AB7



TELEVISION AMPLIFIER PENTODE

SINGLE-ENDED METAL TYPE

Heater \star	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.45	amp.
Direct Interelectrode Capacitances: ^o		
Grid to Plate	0.015 max.	μ f
Input	8	μ f
Output	5	μ f
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 - Suppressor		Pin 7 - Heater
Pin 4 - Grid		Pin 8 - Plate
Mounting Position	BOTTOM VIEW (8N)	Any



AMPLIFIER

Plate Voltage	300 max.	volts
Screen Voltage	200 max.	volts
Screen-Supply Voltage	300 max.	volts
Plate Dissipation ^o	3.75 max.	watts
Screen Dissipation	0.65 max.	watt

Typical Operation and Characteristics - Class A₁ Amplifier:

Condition I* Condition II**

Heater \star	6.3	6.3	volts
Plate	300	300	volts
Suppressor \square	0	0	volts
Screen-Supply #	200	300	volts
Series Screen Resistor	-	3000	ohms
Grid ## \bullet	-3	-3	min.volts
Plate Res.	0.7	0.7	approx.megohm
Transcond.	5000	5000	μ hos
Grid Bias for transcond. = 50 μ hos	-15	-22.5	volts
Plate Cur.	12.5	12.5	ma.
Screen Cur.	3.2	3.2	ma.

^o With shell connected to cathode.

* Condition I is with fixed screen supply.

** Condition II is with series screen resistor.

Screen-supply voltages in excess of 200 volts require the use of a series-dropping resistor to limit the voltage at the screen to 200 volts when the plate current is at its normal value of 12.5 milliamperes.

\bullet May be obtained with cathode-bias resistor having a minimum value of 190 ohms.

The d-c resistance in the grid circuit should not exceed 0.25 megohm with fixed bias, or 0.5 megohm with full cathode bias and a series screen resistor.

\circ Precautions should be taken to insure that dissipation rating is not exceeded with expected line-voltage fluctuations, especially in the case of fixed-bias operation.

\square The suppressor should be connected in r-f and i-f stages directly to ground to minimize feedback.

\star The potential difference between heater and cathode should be kept as low as possible.

Note: It is characteristic of a high gm tube to show appreciable changes of input capacitance and input conductance with plate current. In high-frequency circuits, it is necessary to take precautions to minimize this effect.

\leftarrow Indicates a change.

Dec. 1, 1941

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

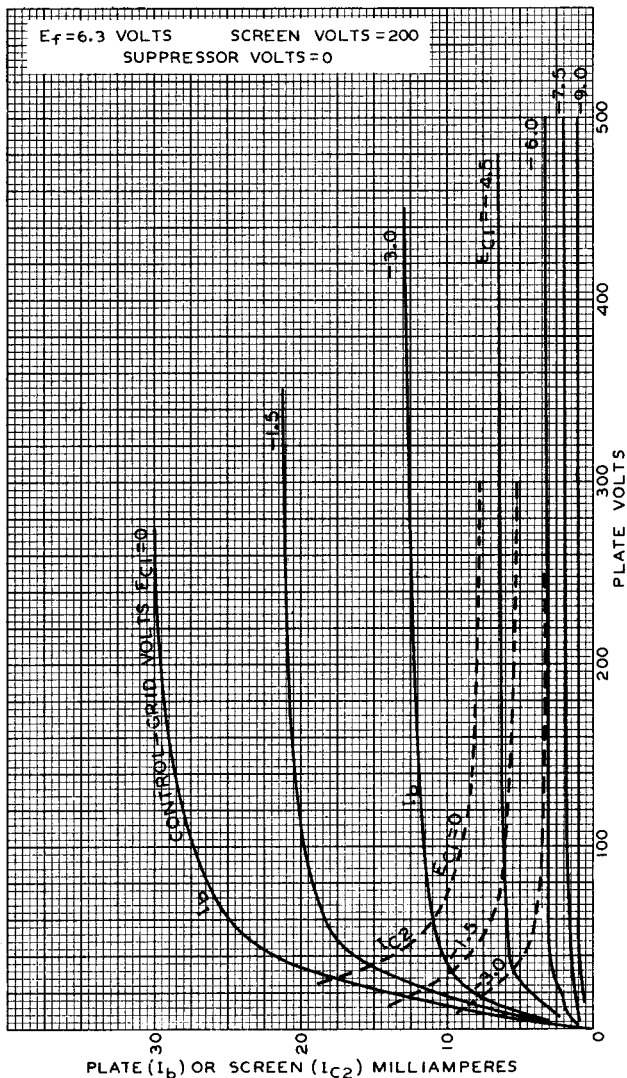
DATA

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AVERAGE PLATE CHARACTERISTICS



JUNE 21, 1938

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92C-6140



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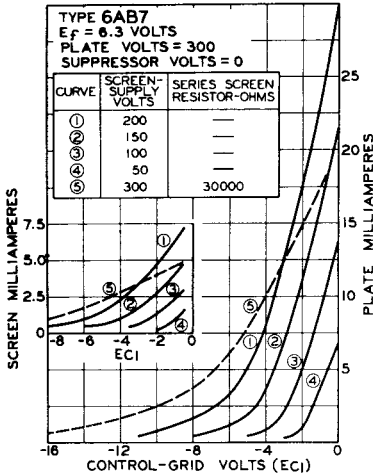
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TELEVISION AMPLIFIER PENTODE

AVERAGE CHARACTERISTICS

TYPE 6AB7
 $E_f = 6.3$ VOLTS
 PLATE VOLTS = 300
 SUPPRESSOR VOLTS = 0

CURVE	SCREEN-SUPPLY VOLTS	SERIES SCREEN RESISTOR-OHMS
①	200	—
②	150	—
③	100	—
④	50	—
⑤	300	30000

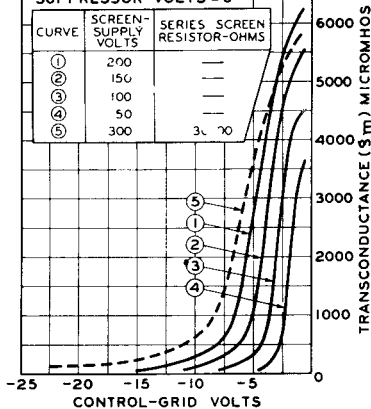


92C-6144

AVERAGE CHARACTERISTICS

TYPE 6AB7
 $E_f = 6.3$ VOLTS
 PLATE VOLTS = 300
 SUPPRESSOR VOLTS = 0

CURVE	SCREEN-SUPPLY VOLTS	SERIES SCREEN RESISTOR-OHMS
①	200	—
②	150	—
③	100	—
④	50	—
⑤	300	30000



92C-6145