



6AK6

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## POWER AMPLIFIER PENTODE

MINIATURE TYPE

Heater	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.15	amp.
Direct Interelectrode Capacitances (Approx.):*		
Grid to Plate	0.12	$\mu\text{f}$
Input	3.6	$\mu\text{f}$
Output	4.2	$\mu\text{f}$
Maximum Overall Length		2-1/8"
Maximum Seated Height		1-7/8"
Length from Base Seat to Bulb Top (excluding tip)		1-1/2" $\pm$ 3/32"
Maximum Diameter		3/4"
Bulb		T-5-1/2
Base <sup>▲</sup>		Miniature Button 7-Pin
Pin 1 - Grid No. 1		Pin 5 - Plate
Pin 2 - Grid No. 3		Pin 6 - Grid No. 2
Pin 3 - Heater		Pin 7 - Cathode
Pin 4 - Heater		
RCA Socket		Stock No. 9914
Mounting Position	BOTTOM VIEW (7BK)	Any



Maximum Ratings Are Design-Center Values

## A-F AMPLIFIER

Plate Voltage	300 max. volts
Screen Voltage (Grid No. 2)	250 max. volts
Plate Dissipation	2.75 max. watts
Screen Dissipation	0.75 max. watt
D-C Heater-Cathode Potential	100 max. volts
<i>Typical Operation and Characteristics - Class A<sub>1</sub> Amplifier:</i>	
Plate Voltage	180 volts
Suppressor (Grid No. 3)	Connected to cathode at socket
Screen Voltage	180 volts
Grid Voltage (Grid No. 1) <sup>◆</sup>	-9 volts
Peak A-F Grid Voltage	9 volts
Zero-Signal Plate Current	15 ma.
Zero-Signal Screen Current	2.5 ma.
Plate Resistance	0.2 megohm
Transconductance	2300 $\mu\text{mhos}$
Load Resistance	10000 ohms
Total Harmonic Distortion	10 %
Max.-Sig. Power Output	1.1 watts

\* with no external shield.

◆ The d-c resistance in the grid circuit under maximum rated conditions should not exceed 0.5 megohm for cathode-bias operation and 0.1 megohm for fixed-bias operation.

▲ The center hole in sockets designed for this base provides for the possibility that this tube type may be manufactured with the exhaust-tube tip at the base end. For this reason, it is recommended that in equipment employing this tube type, no material be permitted to obstruct the socket hole.

OCT. 1, 1943

RCA VICTOR DIVISION

TENTATIVE DATA

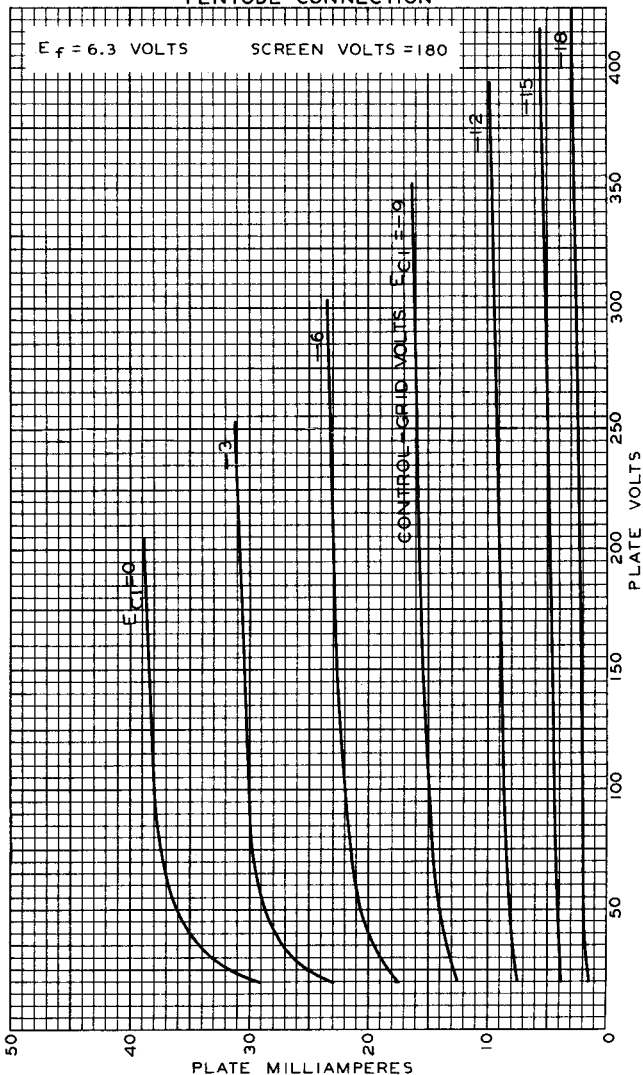
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# AVERAGE PLATE CHARACTERISTICS PENTODE CONNECTION



AUG. 11, 1943

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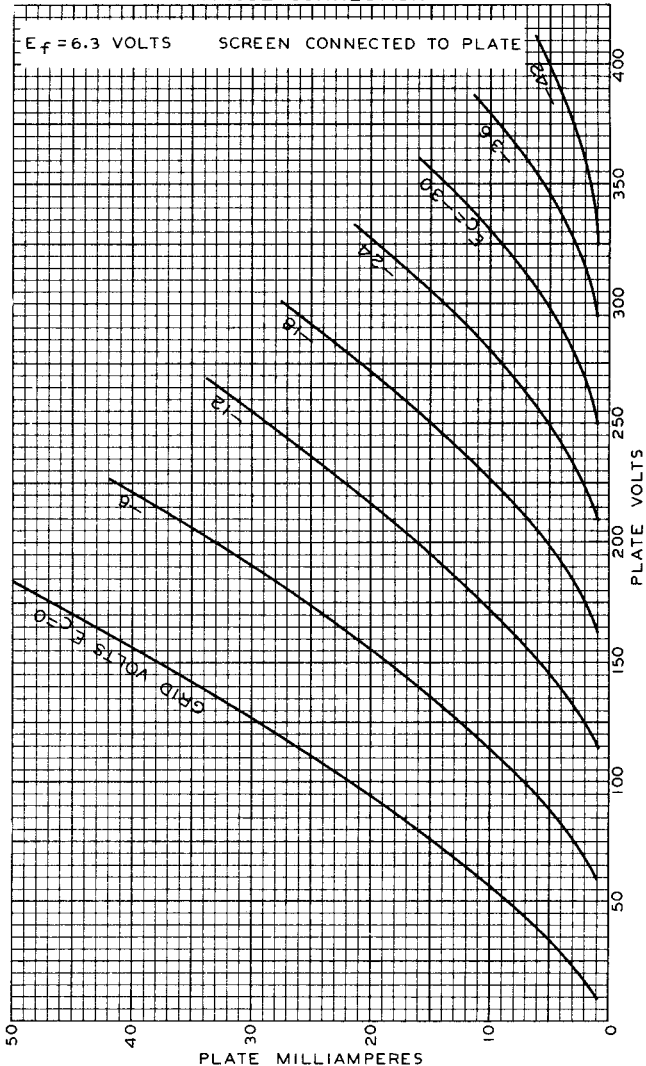
92C-6450



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# AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION

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92C-6449

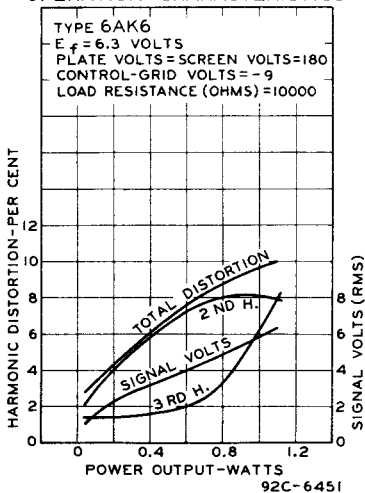
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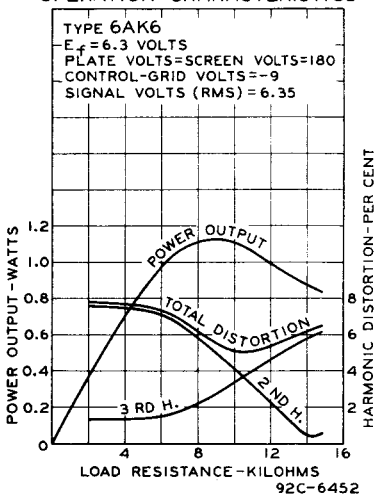
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## POWER AMPLIFIER PENTODE

## OPERATION CHARACTERISTICS



## OPERATION CHARACTERISTICS



OCT. 1, 1943

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CE-6451  
 CE-6452