



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.  
<sup>◆</sup> 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.

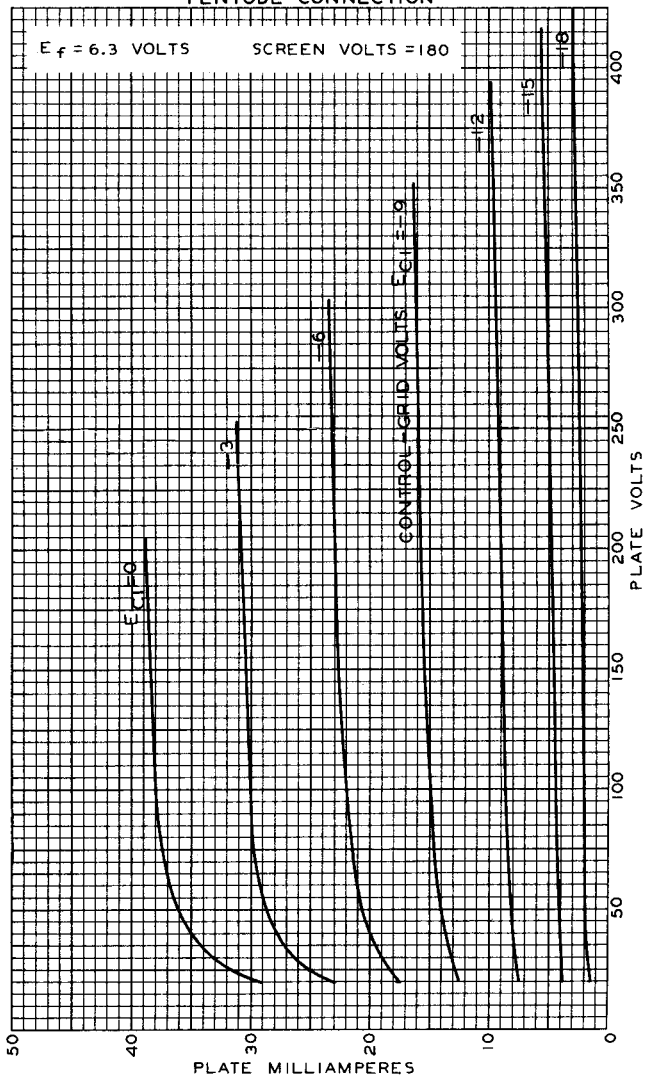
<sup>▲</sup> The center hole in sockets designed for this base provides for the possibility that this tube type may be manufactured with the exhaust-tube tip at the base end. For this reason, it is recommended that in equipment employing this tube type, no material be permitted to obstruct the socket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

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# AVERAGE PLATE CHARACTERISTICS PENTODE CONNECTION



AUG. 11, 1943

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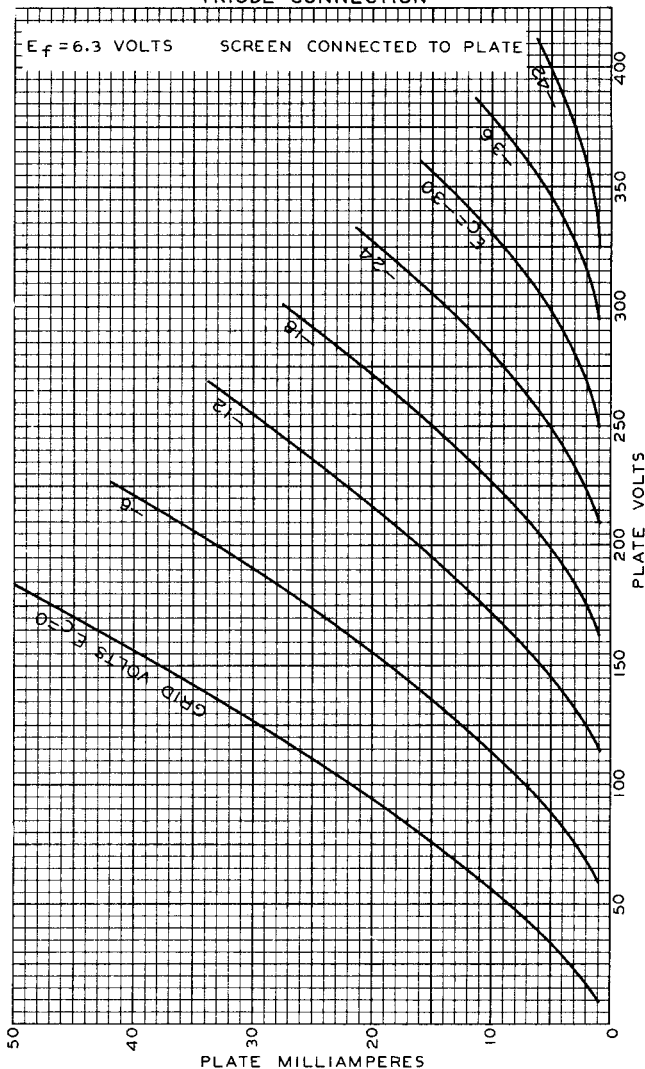
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### AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION



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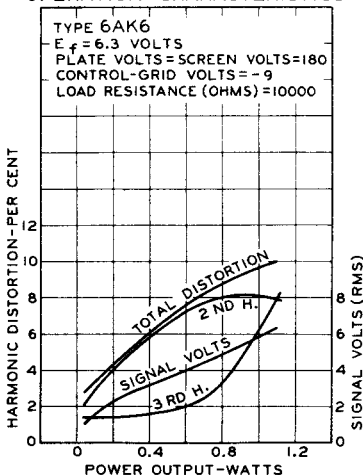
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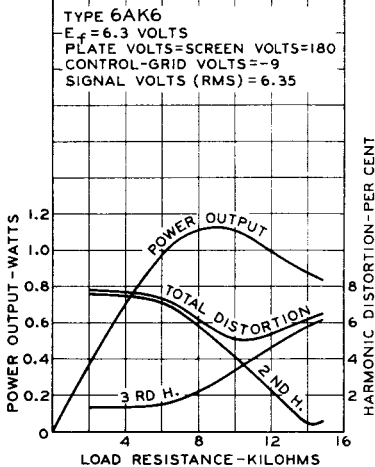
## POWER AMPLIFIER PENTODE

## OPERATION CHARACTERISTICS



92C-6451

## OPERATION CHARACTERISTICS



92C-6452

OCT. 1, 1943

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CE-6451  
 CE-6452