

# 6BA6

## Remote-Cutoff Pentode

### 7-PIN MINIATURE TYPE

#### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathode:			
Voltage (AC or DC) . . . . .	6.3 ± 10%	volts	←
Current at 6.3 volts. . . . .	0.3	amp	
Direct Interelectrode Capacitances:			
	<i>Without External Shield</i>	<i>With External Shield<sup>▲</sup></i>	
Grid No.1 to plate. . . . .	0.0035 max.	0.0035 max.	μf
Grid No.1 to cathode, grid No.3 & internal shield, grid No.2, and heater. . . . .	5.5	5.5	μf
Plate to cathode, grid No.3 & internal shield, grid No.2, and heater .	5	5.5	μf

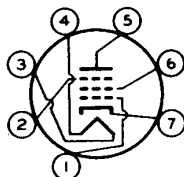
#### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Supply Voltage. . . . .	100	250	volts
Grid No.3 . . . . .	<i>Connected to cathode at socket</i>		
Grid-No.2 Supply Voltage. . . . .	100	100	volts
Cathode Resistor. . . . .	68	68	ohms
Plate Resistance (Approx.). . . . .	0.25	1	megohm
Transconductance. . . . .	4300	4400	μmhos
Plate Current . . . . .	10.8	11	ma
Grid-No.2 Current . . . . .	4.4	4.2	ma
Grid-No.1 Voltage (Approx.) for transconductance (μmhos) = 40. . . . .	-20	-20	volts

#### Mechanical:

Operating Position. . . . .	Any
Maximum Overall Length. . . . .	2-1/8"
Maximum Seated Length . . . . .	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip) . . . . .	1-1/2" ± 3/32"
Diameter. . . . .	0.650" to 0.750" ←
Dimensional Outline . . . . .	See <i>General Section</i>
Bulb. . . . .	T5-1/2
Base. . . . .	Small-Button Miniature 7-Pin (JEDEC No.E7-1)
Basing Designation for BOTTOM VIEW. . . . .	7BK ←

Pin 1 - Grid No.1  
Pin 2 - Grid No.3,  
Internal  
Shield  
Pin 3 - Heater



Pin 4 - Heater  
Pin 5 - Plate  
Pin 6 - Grid No.2  
Pin 7 - Cathode

← Indicates a change.



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## AMPLIFIER — Class A<sub>1</sub>

### Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE. . . . .	330 max. volts
GRID No.3 (SUPPRESSOR GRID). . .	Connect to cathode at socket
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE. . . . .	330 max. volts
GRID-No.2 VOLTAGE. . . . .	See <i>Grid-No.2 Input Rating</i> <i>Chart</i> at front of Receiving Tube Section
GRID-No.1 (CONTROL-GRID) VOLTAGE:	
Negative-bias value. . . . .	55 max. volts
Positive-bias value. . . . .	0 max. volts
GRID-No.2 INPUT:	
For grid-No.2 voltages up to 165 volts. . . . .	0.7 max. watt
For grid-No.2 voltages between 165 and 330 volts. . . . .	See <i>Grid-No.2 Input Rating</i> <i>Chart</i> at front of Receiving Tube Section
PLATE DISSIPATION. . . . .	3.4 max. watts
PEAK HEATER-CATHODE VOLTAGE:	
Heater negative with respect to cathode.	200 max. volts
Heater positive with respect to cathode.	200 <sup>●</sup> max. volts

- ▲ With external shield JEDEC No.316 connected to cathode.
- The dc component must not exceed 100 volts.

→ Indicates a change.

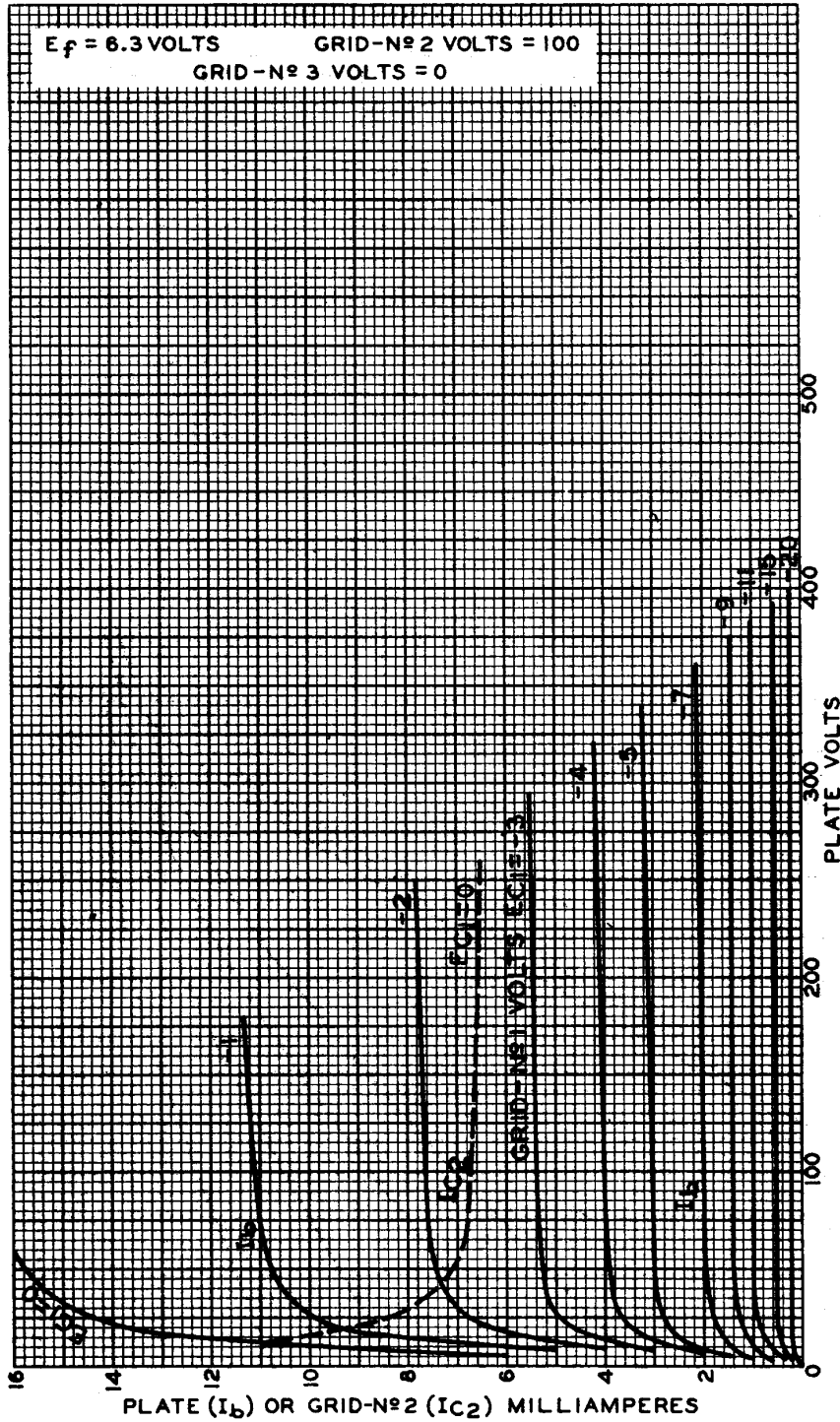




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### AVERAGE PLATE CHARACTERISTICS



OCT. 22, 1945

RCA VICTOR DIVISION  
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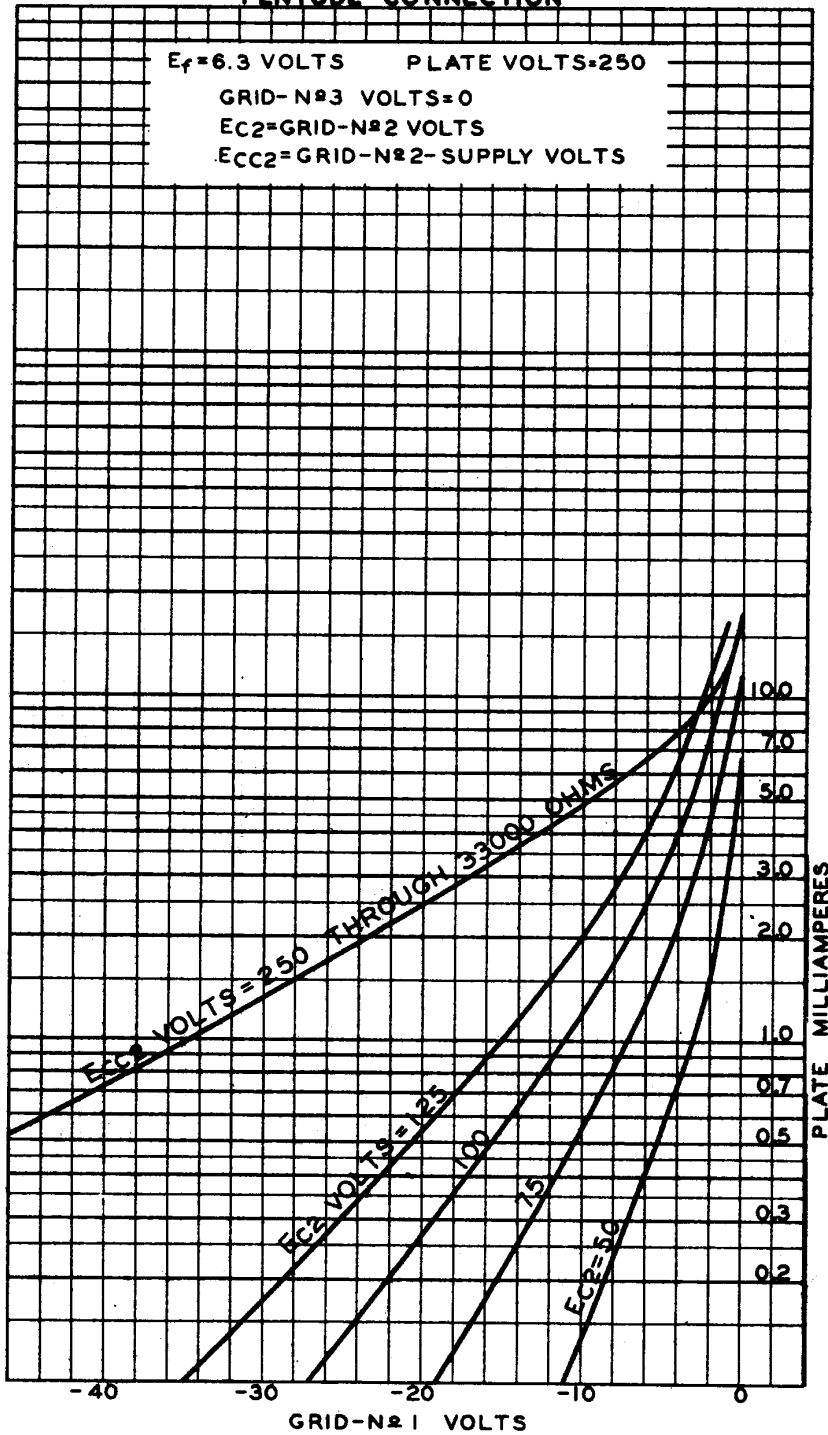
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### AVERAGE CHARACTERISTICS PENTODE CONNECTION



NOV. 12, 1945

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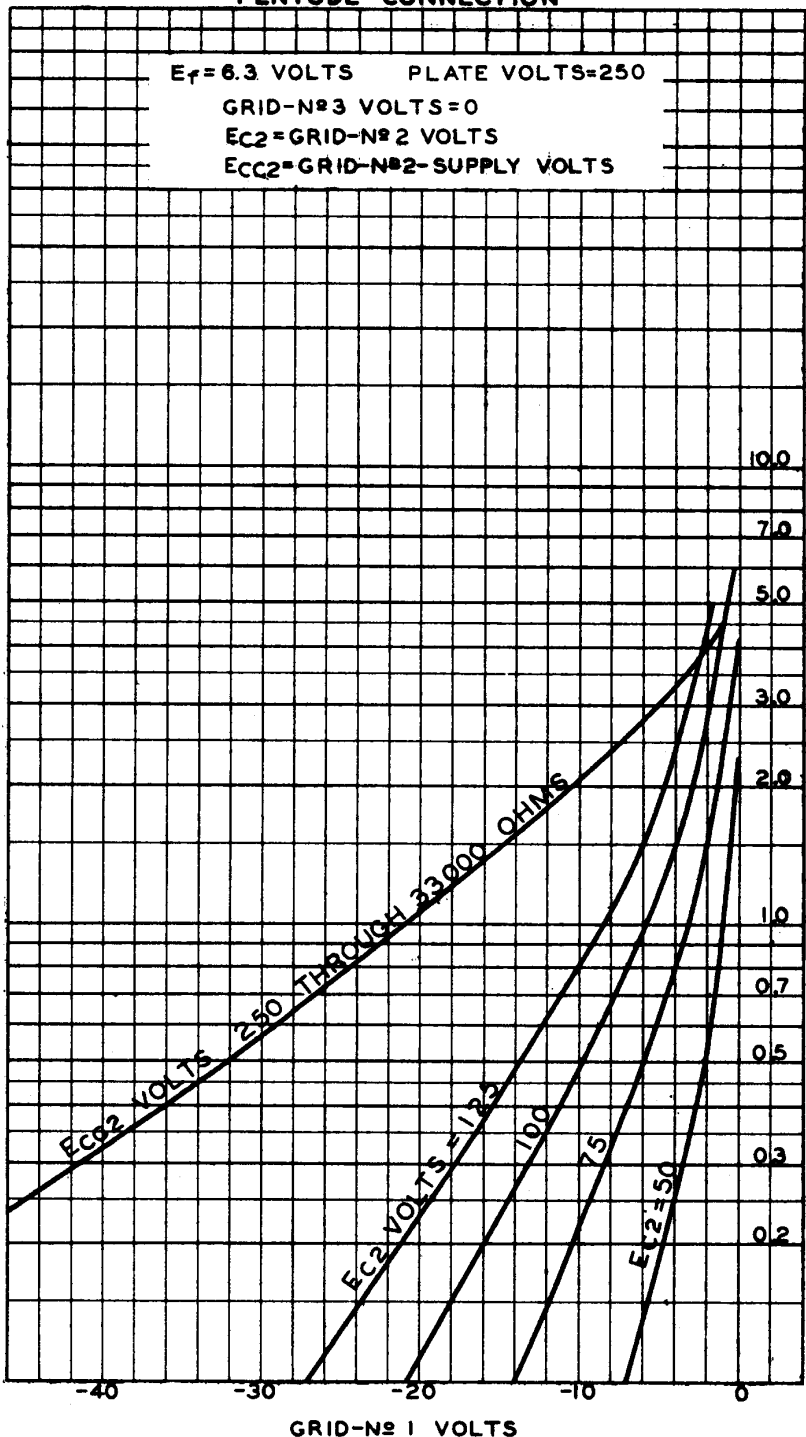
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### AVERAGE CHARACTERISTICS PENTODE CONNECTION



NOV. 12, 1945

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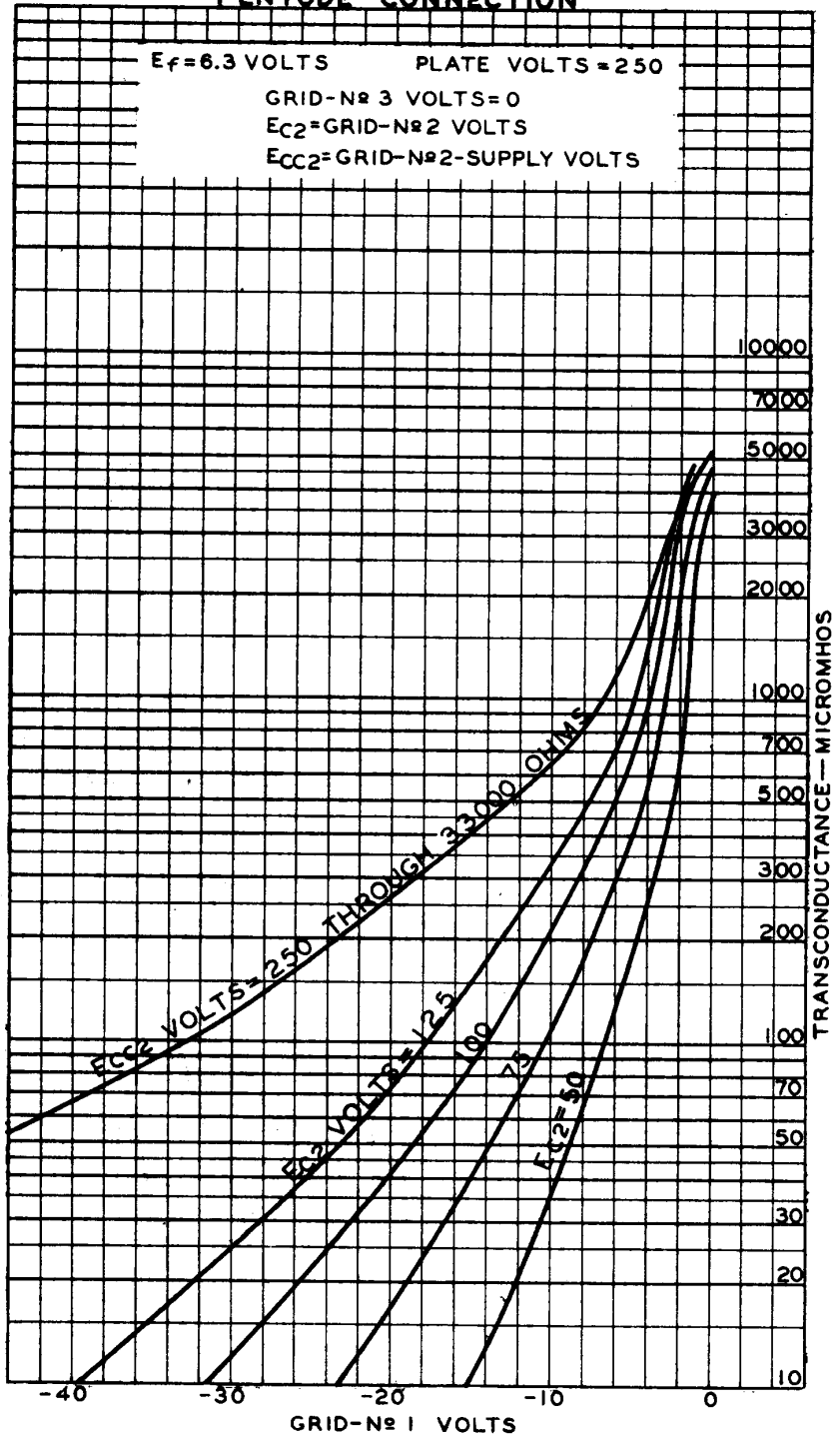
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### AVERAGE CHARACTERISTICS PENTODE CONNECTION



DEC. 10, 1951

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92CM-6621R1