



12EG6

PENTAGRID AMPLIFIER

7-PIN MINIATURE TYPE

For use in automobile radio receivers operating directly from 12-volt storage batteries

12EG6

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage range 10 to 15.9 dc volts

This voltage range is on an absolute basis. For longest life, it is recommended that the heater be operated within the voltage range of 11 to 14 volts.

Current (Approx.)

at 12.6 volts 0.15 amp

Direct Interelectrode Capacitances:^o

Grid No.3 to all other electrodes except plate	6.5	$\mu\mu\text{f}$
Plate to all other electrodes	12	$\mu\mu\text{f}$
Grid No.1 to all other electrodes except plate	5.7	$\mu\mu\text{f}$
Grid No.3 to plate	0.25 max.	$\mu\mu\text{f}$
Grid No.3 to grid No.1	0.15 max.	$\mu\mu\text{f}$
Grid No.1 to plate	0.04 max.	$\mu\mu\text{f}$
Grid No.1 to cathode & grid No.5	3.2	$\mu\mu\text{f}$
Cathode & grid No.5 to all other electrodes except grid No.1	23	$\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier:

With grid No.3 connected to grid No.1 through 100,000-ohm resistor

Heater Voltage	12.6	volts
Plate Voltage	12.6	volts
Grids No.2 & 4 (Screen-Grids) Voltage	12.6	volts
Grid-No.1 (Control-Grid) Voltage:		
Developed across 2.2-megohm resistor	-0.6	volt
Plate Resistance (Approx.)	0.15	megohm
Transconductance, Grid No.3 to Plate	800	μmhos
Plate Current	0.55	ma
Grids-No.2 & 4 Current	2.8	ma
Grid-No.1 Voltage (Approx.) for grid-No.3- to-plate transconductance of 20 μmhos	-3	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" \pm 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline	See General Section
Bulb	T5-1/2

^o: See next page.

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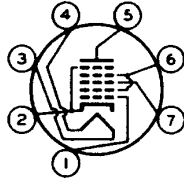


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Base. Small-Button Miniature 7-Pin (JETEC No.E7-1)
Basing Designation for BOTTOM VIEW. 7CH

Pin 1 - Grid No.1
Pin 2 - Cathode,
Grid No.5
Pin 3 - Heater
Pin 4 - Heater



Pin 5 - Plate
Pin 6 - Grid No.2,
Grid No.4
Pin 7 - Grid No.3

AMPLIFIER — Class A₁

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE	16 max.	volts
GRID-No.3 (CONTROL-GRID) VOLTAGE:		
Negative-bias value	16 max.	volts
Positive-bias value	0 max.	volts
GRIDS-No.2 & 4 (SCREEN-GRIDS)		
SUPPLY VOLTAGE.	16 max.	volts
GRIDS-No.2 & 4 VOLTAGE.	16 max.	volts
CATHODE CURRENT	20 max.	ma
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode .	16 max.	volts
Heater positive with respect to cathode .	16 max.	volts

Maximum Circuit Values:

Grid-No.3-Circuit Resistance.	10 max.	megohms
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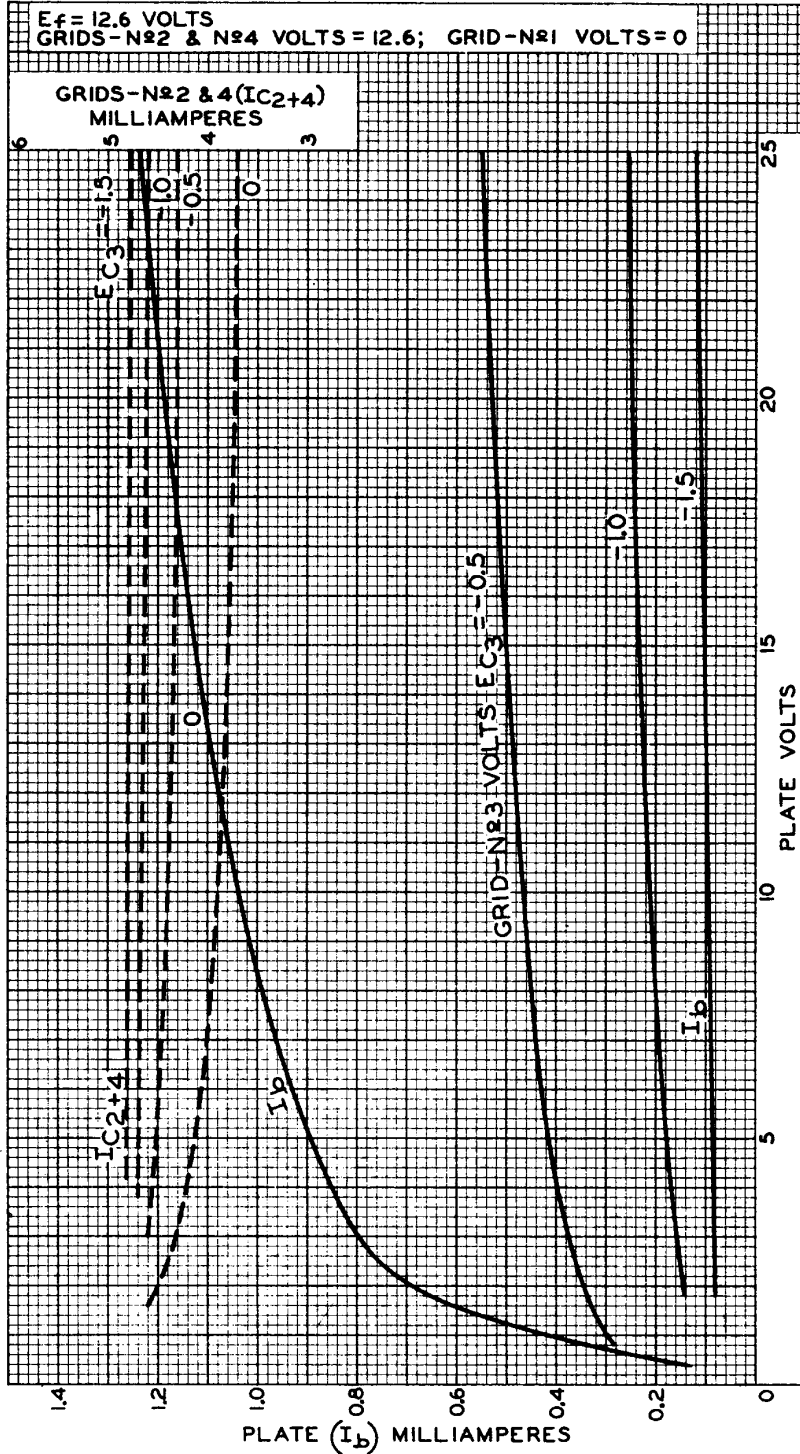
° With external shield JETEC No.316 connected to cathode.



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AVERAGE CHARACTERISTICS



ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

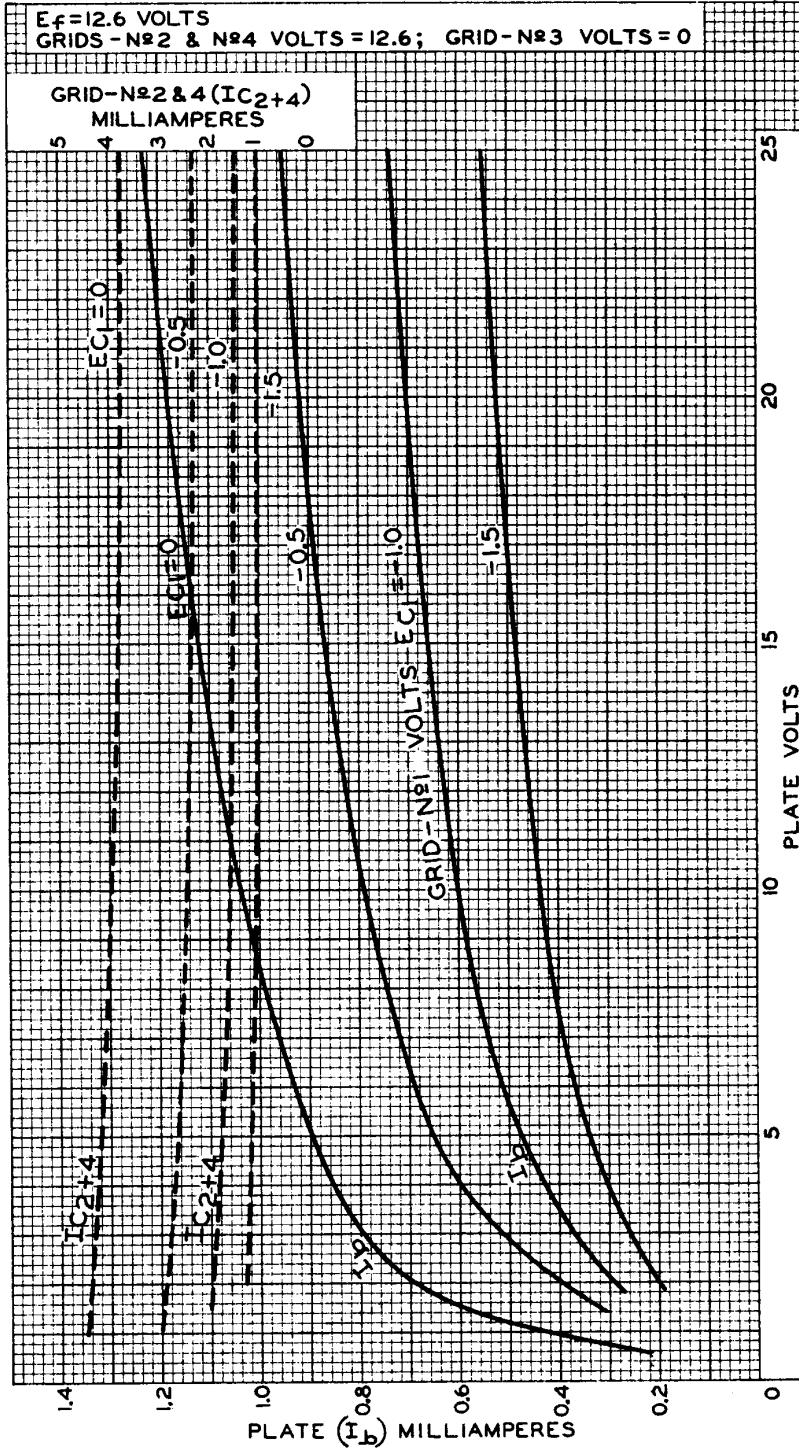
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