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PENTAGRID AMPLIFIER

MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	6.3	ac or dc volts
Current	0.3	amp

Direct Interelectrode Capacitances:*

Grid No.1 to Plate	0.08 max.	$\mu\mu\text{f}$
Grid No.3 to Plate	0.35 max.	$\mu\mu\text{f}$
Grid No.1 to Grid No.3	0.15 max.	$\mu\mu\text{f}$
Grid No.1 to All Other Electrodes and Heater	5.4	$\mu\mu\text{f}$
Grid No.3 to All Other Electrodes and Heater	6.9	$\mu\mu\text{f}$
Plate to All Other Electrodes and Heater	7.6	$\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier:

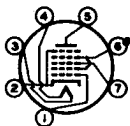
Plate Voltage	250	volts
Grids-No.2-and-No.4 Voltage	100	volts
Grid-No.3 Voltage	-2.5	volts
Grid-No.1 Voltage	-2.5	volts
Grid-No.3-to-Plate Transconductance	500	μmhos
Grid-No.1-to-Plate Transconductance	1900	μmhos
Plate Current	6.5	ma
Grids-No.2-and-No.4 Current	9	ma
Grid-No.3 Volts (Approx.) for plate current of 35 μamp and grid-No.1 volts = -4	-15	volts
Grid-No.1 Volts (Approx.) for plate current of 35 μamp and grid-No.3 volts = 0	-12	volts

Mechanical:

Mounting Position	Any
Maximum Overall Length	2-1/8"
Maximum Seated Length	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	Small-Button Miniature 7-Pin (JETEC No.E7-1)

BOTTOM VIEW

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

*: With no external shield.

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GATED AMPLIFIER SERVICE

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE	300 max.	volts
GRIDS-No.2-and-No.4 VOLTAGE	<i>See Rating Curve at front of this Section</i>	
GRIDS-No.2-and-No.4 SUPPLY VOLTAGE	300 max.	volts
GRID-No.3 SUPPLY VOLTAGE:		
Negative Bias Value	50 max.	volts
Positive Bias Value	0 max.	volts
Positive Peak Value	25 max.	volts
GRID-No.1 SUPPLY VOLTAGE:		
Negative Bias Value	100 max.	volts
PLATE DISSIPATION	2 max.	watts
GRID-No.3 INPUT	0.1 max.	watt
GRIDS-No.2-and-No.4 INPUT	1 max.	watt
GRID-No.1 INPUT	0.1 max.	watt
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	200 max.	volts
Heater positive with respect to cathode	200 [#] max.	volts

Characteristics as Sync Separator and Sync Clipper:

Plate Voltage	10	volts
Grid-No.3 Voltage	0	volts
Grids-No.2-and-No.4 Voltage	25	volts
Grid-No.1 Voltage	0	volts
Plate Current	1.4	ma
Grids-No.2-and-No.4 Current	3.5	ma
Grid-No.3 Bias Volts (Approx.) for plate voltage of 25 volts, grids-No.2-and-No.4 voltage of 25 volts, grid-No.1 voltage of 0 volts, and plate current of 50 μ amp		
	-2.5	volts
Grid-No.1 Bias Volts (Approx.) for plate voltage of 25 volts, grids-No.2-and-No.4 voltage of 25 volts, grid-No.3 voltage of 0 volts, and plate current of 50 μ amp		
	-2.3	volts

Maximum Circuit Values:

Grid-No.1 or Grid-No.3-Circuit Resistance:		
For fixed-bias operation	0.5 max.	megohm
For cathode-bias operation	1.0 max.	megohm

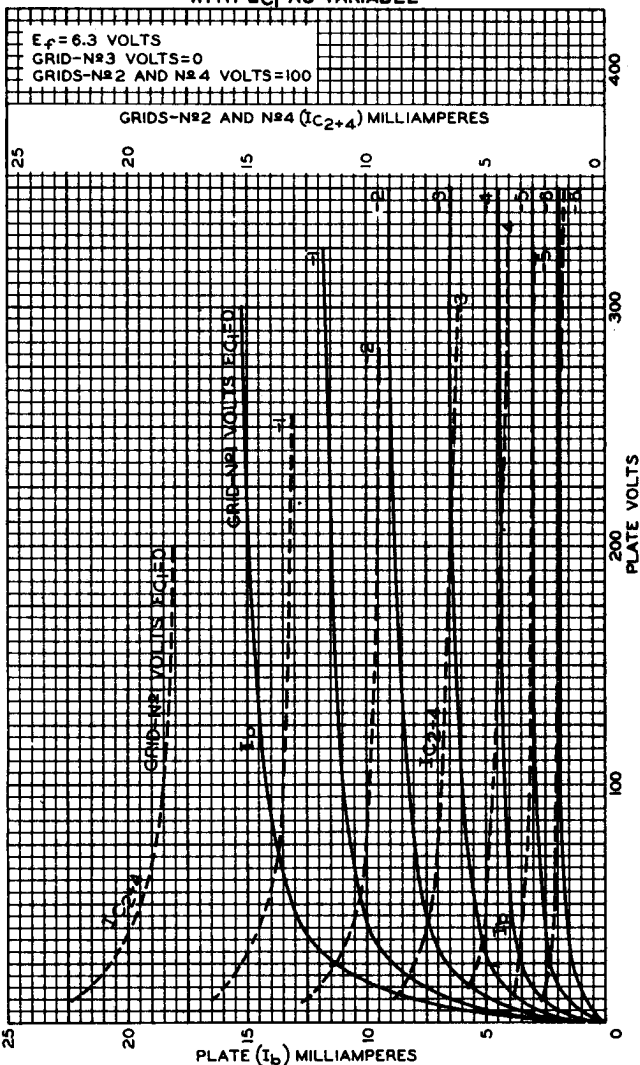
The dc component must not exceed 100 volts.



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AVERAGE OPERATION CHARACTERISTICS WITH E_{c1} AS VARIABLE

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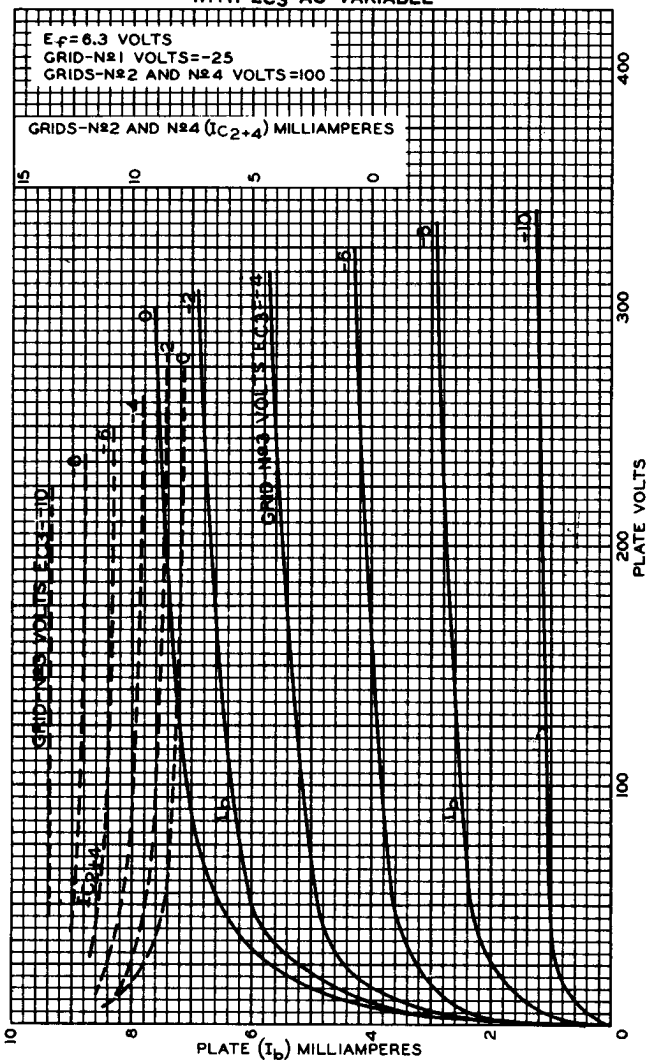
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AVERAGE OPERATION CHARACTERISTICS WITH EC_3 AS VARIABLE



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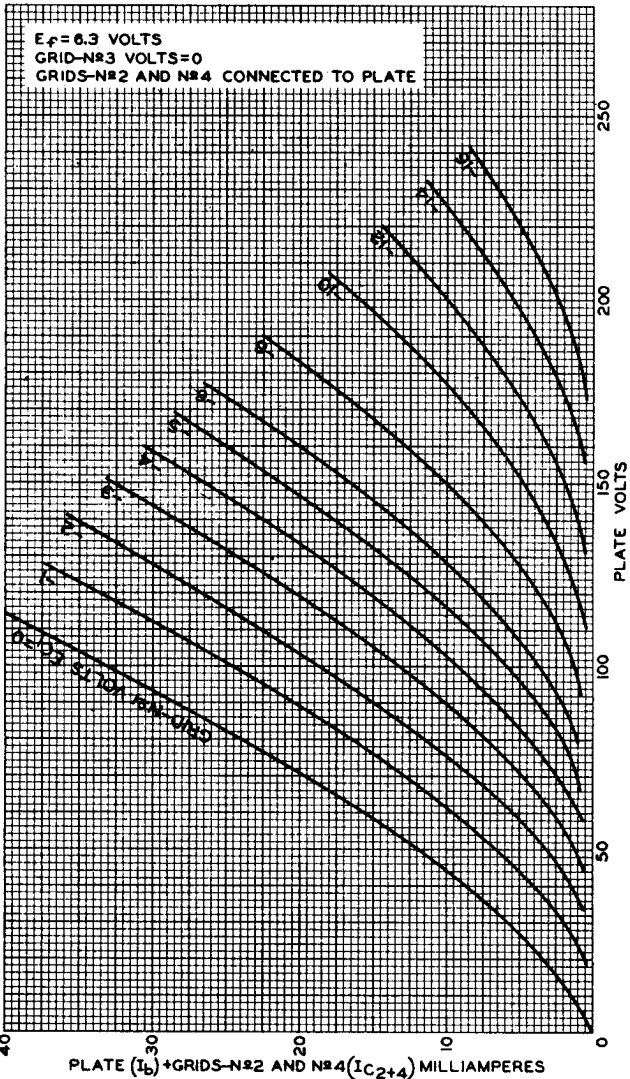
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AVERAGE PLATE CHARACTERISTICS



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