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HIGH-MU TRIODE–SHARP-CUTOFF PENTODE

9-PIN MINIATURE TYPE

Intended for use in equipment having series heater-string arrangement

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Voltage	6.3	ac or dc volts
Current	0.6	amp
Warm-up time (Average)	11	sec

For definition of heater warm-up time and method of determining it, see sheet HEATER WARM-UP TIME MEASUREMENT at front of this Section.

Direct Interelectrode Capacitances:

	Without External Shield	*With External Shield*[o]	
Triode Unit:			
Grid to plate	2.2	2.2	μμf
Grid to cathode and heater	3.2	3.4	μμf
Plate to cathode and heater	0.32	1.7	μμf
Pentode Unit:			
Grid No.1 to plate	0.036 max.	0.03 max.	μμf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater	11	11	μμf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater	2.8	3.6	μμf
Triode grid to pentode plate	0.03 max.	0.008 max.	μμf
Pentode grid No.1 to triode plate	0.008 max.	0.005 max.	μμf
Pentode plate to triode plate	0.2 max.	0.05 max.	μμf

Mechanical:

Mounting Position	Any
Maximum Overall Length	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" ± 3/32"
Maximum Diameter	7/8"
Bulb	T-6-1/2

[o] With external shield JETEC No.315 connected to cathode of unit under test.

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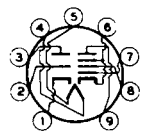
Base . . . . . Small-Button Noval 9-Pin (JETEC No.E9-1)
Basing Designation for BOTTOM VIEW 9DX

Pin 1 - Triode Cathode
Pin 2 - Triode Grid
Pin 3 - Triode Plate
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Pent. Cath., Grid No.3, Internal Shield
Pin 7 - Pentode Grid No.1
Pin 8 - Pentode Grid No.2
Pin 9 - Pent. Plate

TRIODE UNIT - Class A_1 Amplifier

Maximum Ratings, *Design-Center Values:*

PLATE VOLTAGE	300	max.	volts
PLATE DISSIPATION	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

Typical Operation and Characteristics:

Plate Voltage	200		volts
Grid Voltage	-2		volts
Amplification Factor	70		
Plate Resistance (Approx.)	17500		ohms
Transconductance	4000		μmhos
Grid Voltage (Approx.) for plate current of 10 μamp	-5		volts
Plate Current	4		ma

Maximum Circuit Values:

Grid-Circuit Resistance:			
For fixed-bias operation	0.5	max.	megohm
For cathode-bias operation	1.0	max.	megohm

PENTODE UNIT - Class A_1 Amplifier

Maximum Ratings, *Design-Center Values:*

PLATE VOLTAGE	300	max.	volts
GRID-No.2 (SCREEN) SUPPLY VOLTAGE	300	max.	volts
GRID-No.2 VOLTAGE . . . . . *See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*			
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Negative bias value	50	max.	volts
Positive bias value	0	max.	volts
PLATE DISSIPATION	3	max.	watts

▲: See next page.

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HIGH-MU TRIODE—
SHARP-CUTOFF PENTODE

GRID-No.2 INPUT:			
For grid-No.2 voltages up to 150 volts .	1	max.	watt
For grid-No.2 voltages between 150 and 300 volts.	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*		
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200▲	max.	volts

Typical Operation and Characteristics:

Plate Voltage.	200	volts
Grid-No.2 Voltage.	150	volts
Grid-No.1 Voltage.	0	volts
Cathode-Bias Resistor.	180	ohms
Plate Resistance (Approx.)	0.4	megohm
Transconductance	9000	μmhos
Grid-No.1 Voltage (Approx.) for plate current of 10 μamp	-10	volts
Plate Current.	13	ma
Grid-No.2 Current.	3.5	ma

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.25	max.	megohm
For cathode-bias operation	1.0	max.	megohm

▲ The dc component must not exceed 100 volts.

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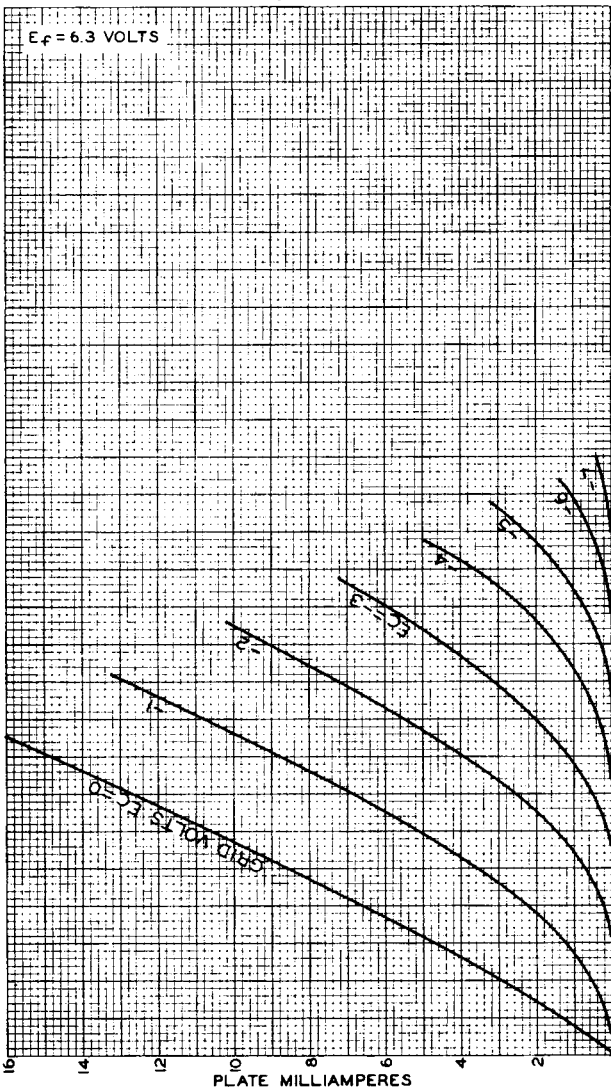
AVERAGE PLATE CHARACTERISTICS

TRIODE UNIT



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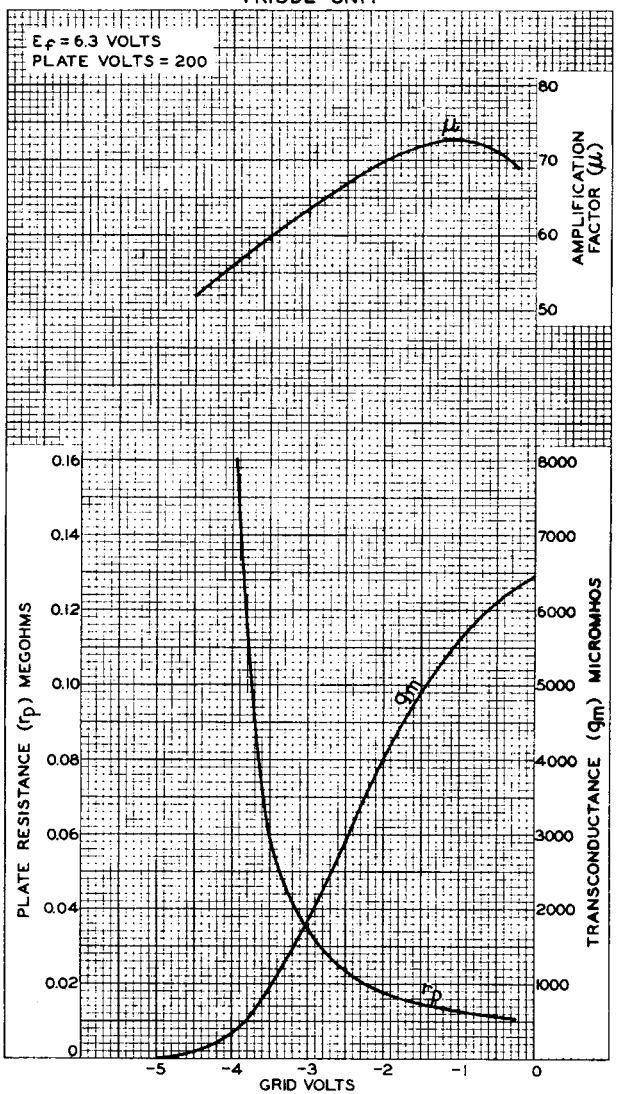
AVERAGE CHARACTERISTICS

TRIODE UNIT



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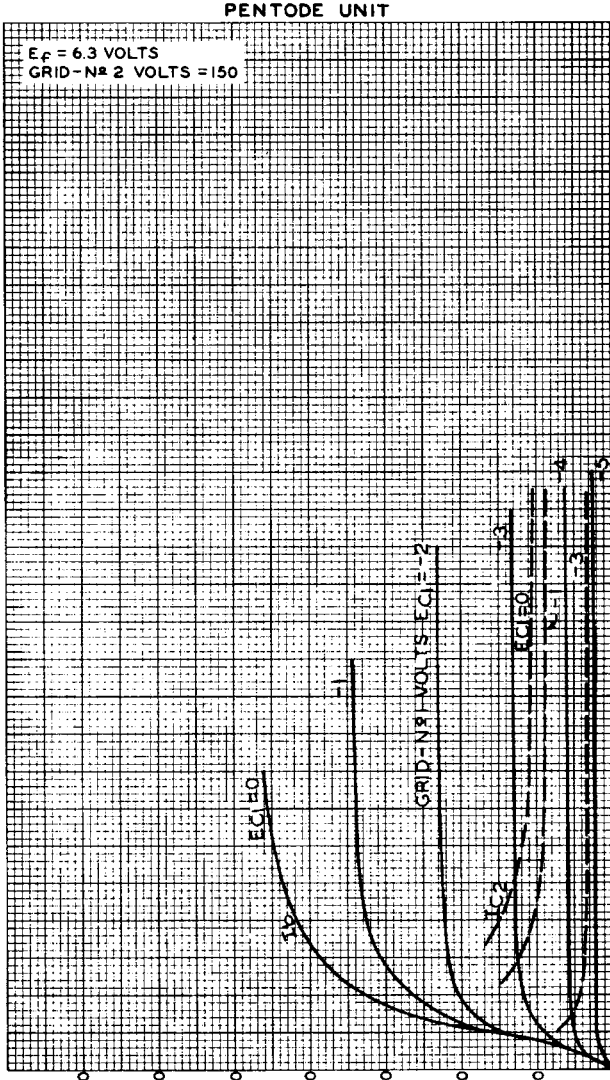
AVERAGE CHARACTERISTICS
PENTODE UNIT



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AVERAGE CHARACTERISTICS
PENTODE UNIT