

12AX7

High-Mu Twin Triode

9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:

Heater arrangement	Series	Parallel	
Voltage (AC or DC)	12.6	6.3 ± 10%	volts
Current	0.15 ± 6%	0.3	amp

Direct Interelectrode Capacitances (Approx.):

	Without External Shield	With External Shield ^a	
Grid to plate (Each unit)	1.7	1.7	μμf
Grid to cathode and heater (Each unit)	1.6	1.8	μμf
Plate to cathode and heater:			
Unit No.1	0.46	1.9	μμf
Unit No.2	0.34	1.9	μμf

Characteristics, Class A₁ Amplifier (Each Unit):

Plate Voltage	100	250	volts
Grid Voltage.	-1	-2	volts
Amplification Factor.	100	100	
Plate Resistance (Approx.)	80000	62500	ohms
Transconductance.	1250	1600	μmhos
Plate Current	0.5	1.2	ma

Mechanical:

Operating Position. Any
 Maximum Overall Length. 2-3/16"
 Maximum Seated Length 1-15/16"
 Length, Base Seat to Bulb Top (Excluding tip) . . 1-9/16" ± 3/32"
 Diameter. 0.750" to 0.875"
 Dimensional Outline See General Section
 Bulb. T6-1/2
 Base. Small-Button Noval 9-Pin (JEDEC No.E9-1)
 Basing Designation for BOTTOM VIEW. 9A

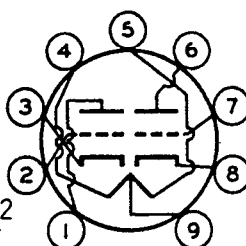
Pin 1 - Plate of
Unit No.2

Pin 2 - Grid of
Unit No.2

Pin 3 - Cathode of
Unit No.2

Pins 4 & 9 - Heater of
Unit No.2

Pins 5 & 9 - Heater of
Unit No.1



Pin 6 - Plate of
Unit No.1

Pin 7 - Grid of
Unit No.1

Pin 8 - Cathode of
Unit No.1

Pin 9 - Heater Tap

← Indicates a change.



RADIO CORPORATION OF AMERICA
 Electron Tube Division
 Harrison, N. J.

DATA
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AMPLIFIER — Class A₁

Values are for Each Unit

→ Maximum Ratings, Design-Maximum Values:

PLATE VOLTAGE.	330	max.	volts
GRID VOLTAGE:			
Negative-bias value.	55	max.	volts
Positive-bias value.	0	max.	volts
PLATE DISSIPATION.	1.2	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode. .	200	max.	volts
Heater positive with respect to cathode. .	200 ^b	max.	volts

Typical Operation as Resistance-Coupled Amplifier:

See *RESISTANCE-COUPLED-AMPLIFIER CHART No.25*
at front of this Section

^a With external shield JEDEC No.315 connected to cathode of unit under test.

^b The dc component must not exceed 100 volts.

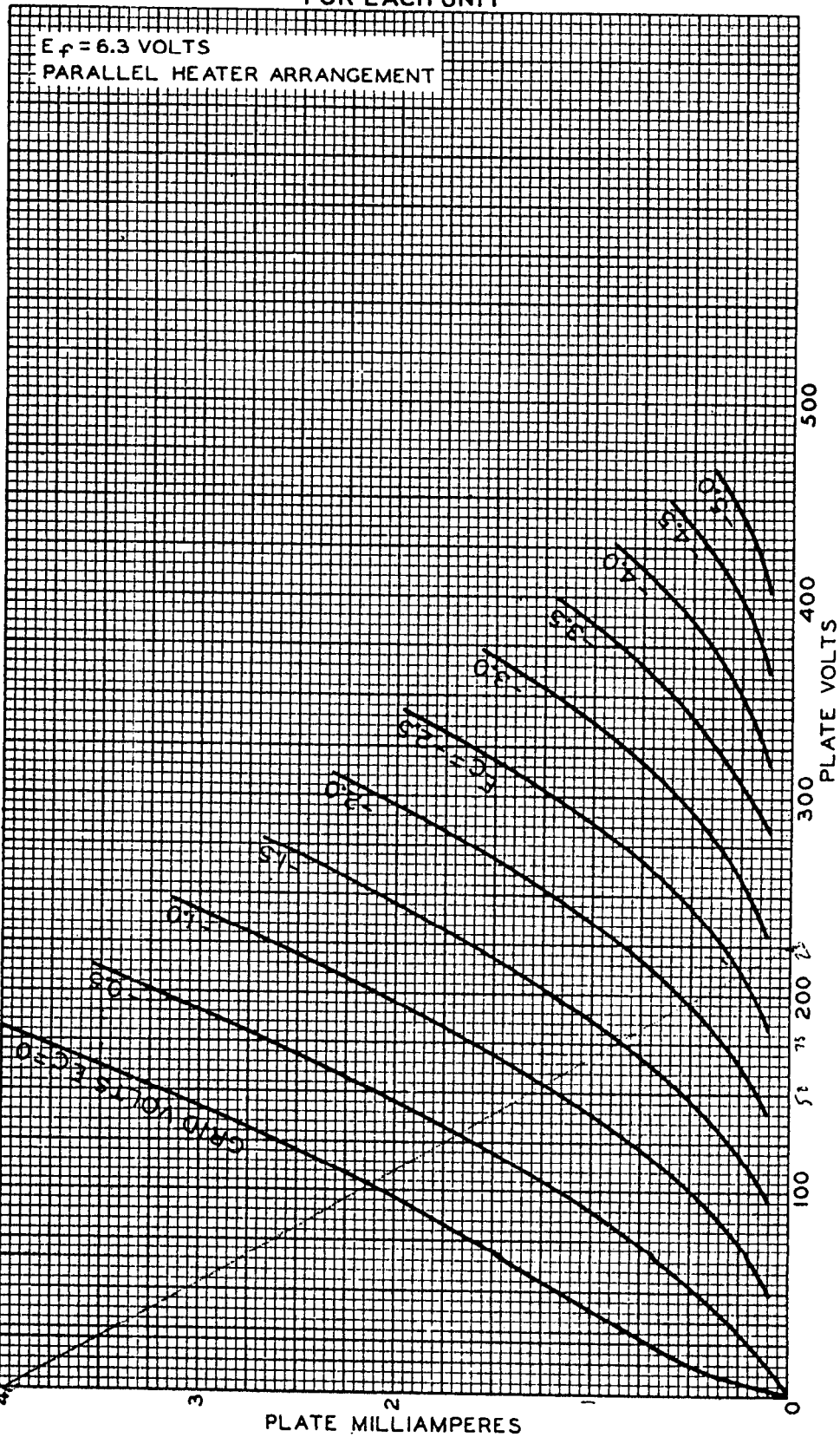
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AVERAGE PLATE CHARACTERISTICS FOR EACH UNIT



JULY 30, 1947

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RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

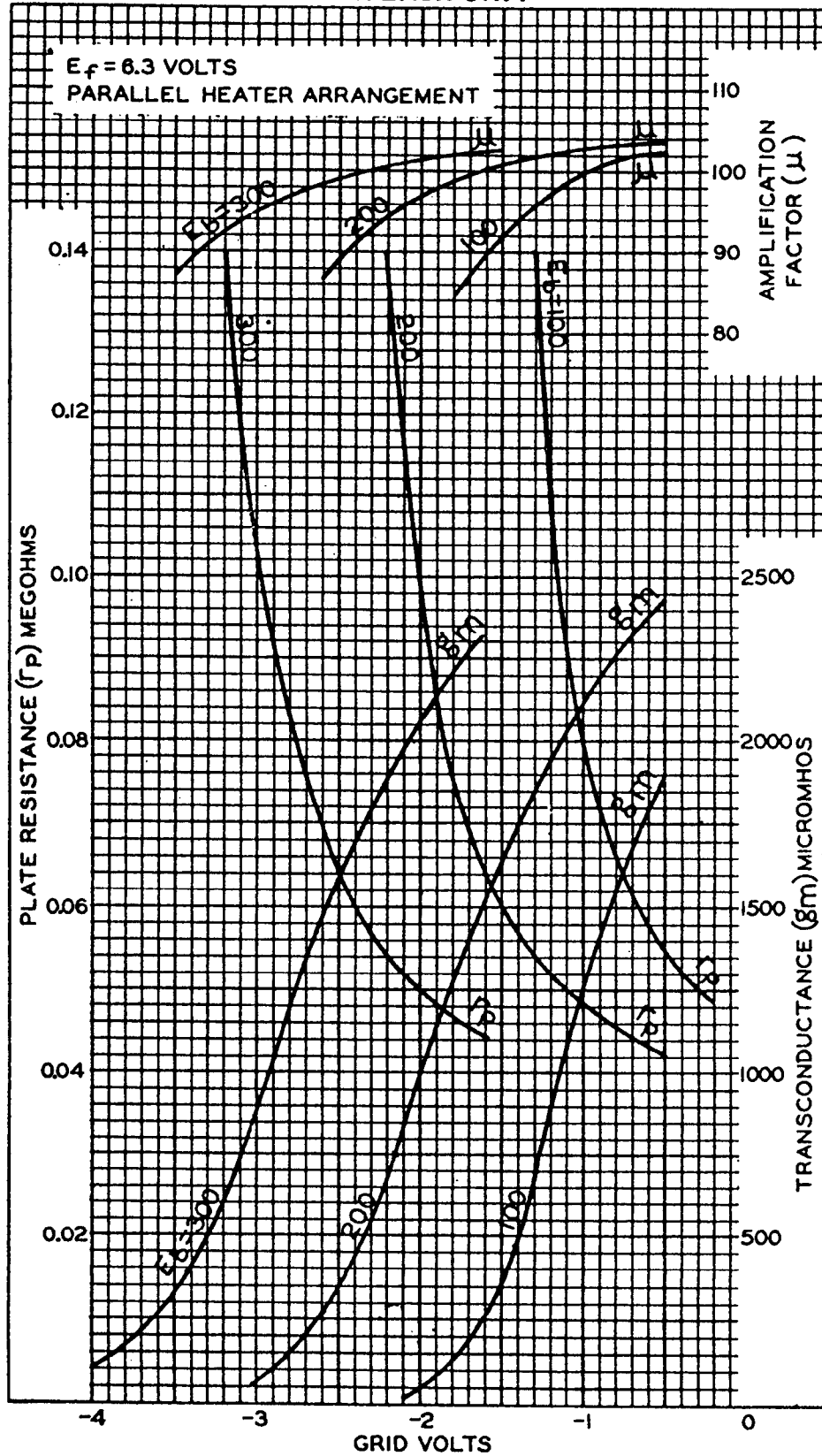
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AVERAGE CHARACTERISTICS FOR EACH UNIT



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