



12BH7

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MEDIUM-MU TWIN TRIODE

9-PIN MINIATURE TYPE

GENERAL DATA**Electrical:**

Heater, for Unipotential Cathodes:

Heater Arrangement	Series	Parallel	
Voltage	12.6	6.3	ac or dc volts
Current	0.3	0.6	amp

Direct Interelectrode Capacitances (Approx.) No external shield:

	Unit No. 1	Unit No. 2	
Grid to Plate	2.4	2.4	μf
Input	3.3	3.3	μf
Output	0.8	0.8	μf
Plate of Unit No. 1 to Plate of Unit No. 2	0.9	0.9	μf

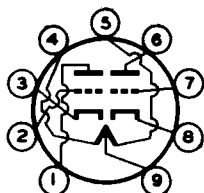
Mechanical:

Mounting Position	Any
Maximum Overall Length	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" $\pm$ 3/32"
Maximum Diameter	7/8"
Bulb	T-6-1/2
Base	Small-Button Noval 9-Pin (JETEC No. E9-1)
Basing Designation for BOTTOM VIEW	9A

Pin 1-Plate of
Unit No. 2Pin 2-Grid of
Unit No. 2Pin 3-Cathode of
Unit No. 2

Pin 4-Heater

Pin 5-Heater

Pin 6-Plate of
Unit No. 1Pin 7-Grid of
Unit No. 1Pin 8-Cathode of
Unit No. 1Pin 9-Heater
Mid-tap**AMPLIFIER--Class A₁**

Values are for Each Unit

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE	300 max.	volts
GRID VOLTAGE:		
Negative bias value	50 max.	volts
Positive bias value	0 max.	volts
CATHODE CURRENT	20 max.	ma
PLATE DISSIPATION	3.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	180 max.	volts
Heater positive with respect to cathode	180 max.	volts

MAY 1, 1952

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

TENTATIVE DATA

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MEDIUM-MU TWIN TRIODE

Characteristics:

Plate Voltage	250	volts
Grid Voltage	-10.5	volts
Amplification Factor	17	
Plate Resistance (Approx.)	5500	ohms
Transconductance	3100	μ hos
Grid-No.1 Voltage (Approx.) for plate current of 10 μ amp	-25	volts
Plate Current	11.5	ma

Circuit Values:

Grid-Circuit Resistance:

For cathode-bias operation	2.5 max.	megohms
For fixed-bias operation	1 max.	megohm

VERTICAL DEFLECTION AMPLIFIER

*Values are for Each Unit***Maximum Ratings, Design-Center Values:***For operation in a 525-line, 30-frame system**

DC PLATE VOLTAGE	500 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE [▲] . . .	1350 max.	volts
DC GRID VOLTAGE	-50 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE [■]	200 max.	volts
DC CATHODE CURRENT	20 max.	ma
PLATE DISSIPATION [■]	3.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	180 max.	volts
Heater positive with respect to cathode	180 max.	volts

Circuit Values:

Grid-Circuit Resistance:

For cathode-bias operation	2.5 max.	megohms
For fixed-bias operation	1 max.	megohm

* As described in "Standards of Good Engineering Practice for Television Broadcast Stations", Federal Communications Commission.

[▲] The duration of the voltage pulse must not exceed 15 per cent of one scanning cycle. In a 525-line, 30-frame system, 15 per cent of one scanning cycle is 2.5 milliseconds.

[■] It is particularly important from the standpoint of life that these values should not be exceeded by more than 10 per cent under any condition of high-line voltage or misadjustment of any of the controls.

MAY 1, 1952

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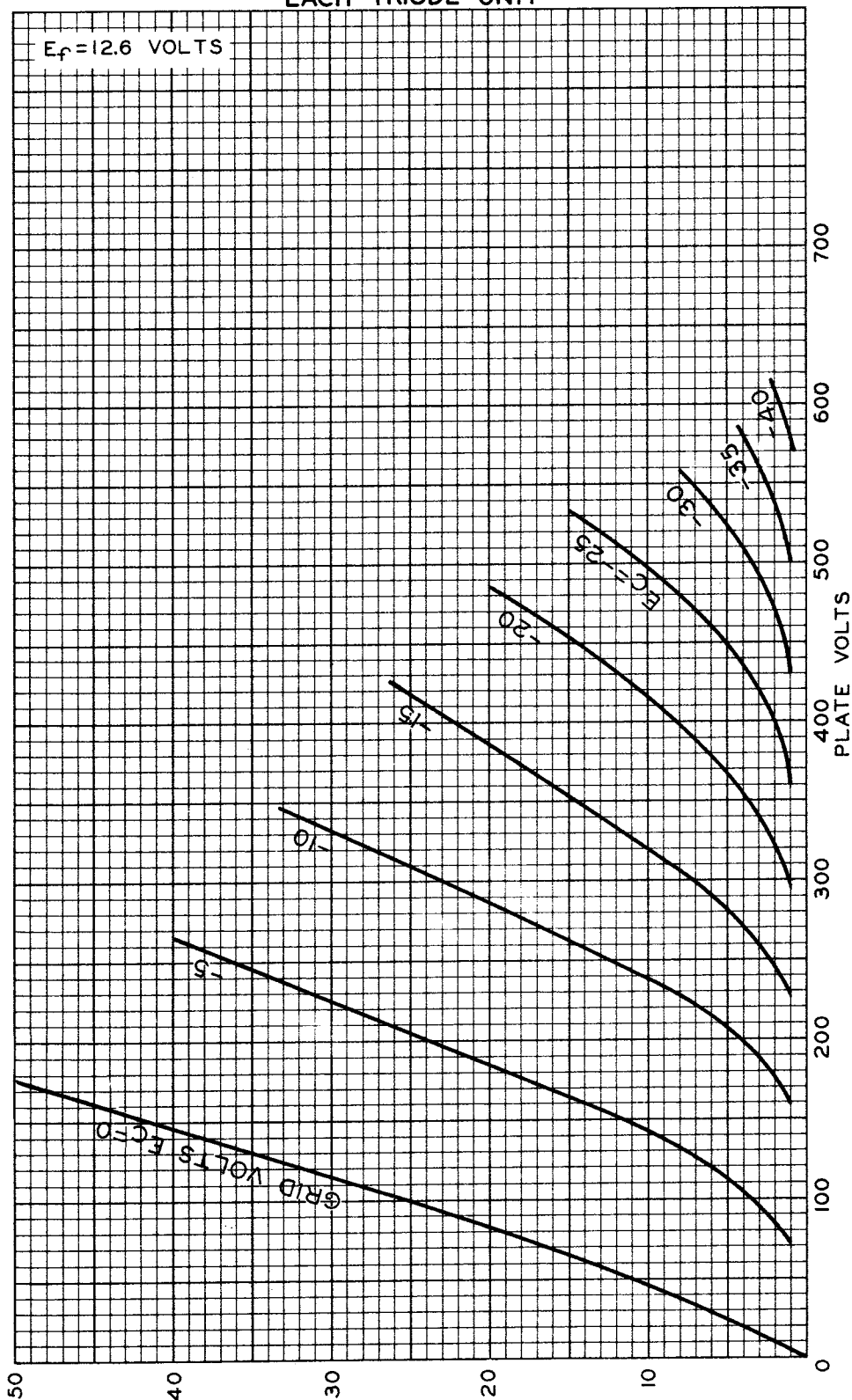
TENTATIVE DATA



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AVERAGE PLATE CHARACTERISTICS EACH TRIODE UNIT



JAN. 25, 1952

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