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MEDIUM-MU TWIN TRIODE

9-PIN MINIATURE TYPE

With heater having controlled warm-up time

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:			
Voltage (AC or DC)	6.3		volts
Current	0.6 ± 6%		amp
Warm-up time (Average)	11		sec
Direct Interelectrode Capacitances (Each unit, approx.):			
Grid to plate	4		μμf
Grid to cathode, internal shield, and heater	2.3		μμf
Plate to cathode, internal shield, and heater	2.2		μμf

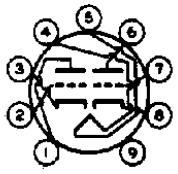
Characteristics, Class A$_1$ Amplifier (Each Unit):

Plate Voltage	90	250	volts
Grid Voltage	0	-8	volts
Amplification Factor	20	20	
Plate Resistance (Approx.)	6700	7700	ohms
Transconductance	3000	2600	μmhos
Plate Current	10	9	ma
Plate Current for grid volts = -12.5	-	1.3	ma
Grid Voltage (Approx.) for plate μa = 10	-7	-18	volts

Mechanical:

Operating 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"
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	9AJ

Pin 1 - Plate of Unit No.2
Pin 2 - Grid of Unit No.2
Pin 3 - Cathode of Unit No.2
Pin 4 - Heater
Pin 5 - Heater



Pin 6 - Plate of Unit No.1
Pin 7 - Grid of Unit No.1
Pin 8 - Cathode of Unit No.1
Pin 9 - Internal Shield

AMPLIFIER — Class A$_1$

Values are for Each Unit

Maximum Ratings, *Design-Maximum Values:*

PLATE VOLTAGE	330	max.	volts
GRID VOLTAGE:			
Positive-bias value	0	max.	volts

→ indicates a change.

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CATHODE CURRENT	22	max.	ma
PLATE DISSIPATION:			
Either plate	4	max.	watts
Both plates (Both units operating)	5.7	max.	watts
PEAK HEATER–CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200▲	max.	volts

Typical Operation as Resistance-Coupled Amplifier:

See RESISTANCE-COUPLED AMPLIFIER CHART No. 29 at front of this Section

Maximum Circuit Values:

Grid-Circuit Resistance:			
For fixed-bias operation	1	max.	megohm

HORIZONTAL-DEFLECTION OSCILLATOR

Values are for Each Unit

→ **Maximum Ratings,** *Design-Maximum Values:*

For operation in a 525-line, 30-frame system□

DC PLATE VOLTAGE	330	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	660	max.	volts
CATHODE CURRENT:			
Peak	330	max.	ma
DC	22	max.	ma
PLATE DISSIPATION:			
Either plate	4	max.	watts
Both plates (Both units operating)	5.7	max.	watts
PEAK HEATER–CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200▲	max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance	2.2	max.	megohms

VERTICAL-DEFLECTION OSCILLATOR

Values are for Each Unit

→ **Maximum Ratings,** *Design-Maximum Values:*

For operation in a 525-line, 30-frame system□

DC PLATE VOLTAGE	330	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	440	max.	volts
CATHODE CURRENT:			
Peak	77	max.	ma
DC	22	max.	ma

→ Indicates a change.

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MEDIUM-MU TWIN TRIODE

PLATE DISSIPATION:			
Either plate	4	max.	watts
Both plates (Both units operating)	5.7	max.	watts
PEAK HEATER–CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200▲	max.	volts
Maximum Circuit Values:			
Grid–Circuit Resistance	2.2	max.	megohms

○ Without external shield.

▲ The dc component must not exceed 100 volts.

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

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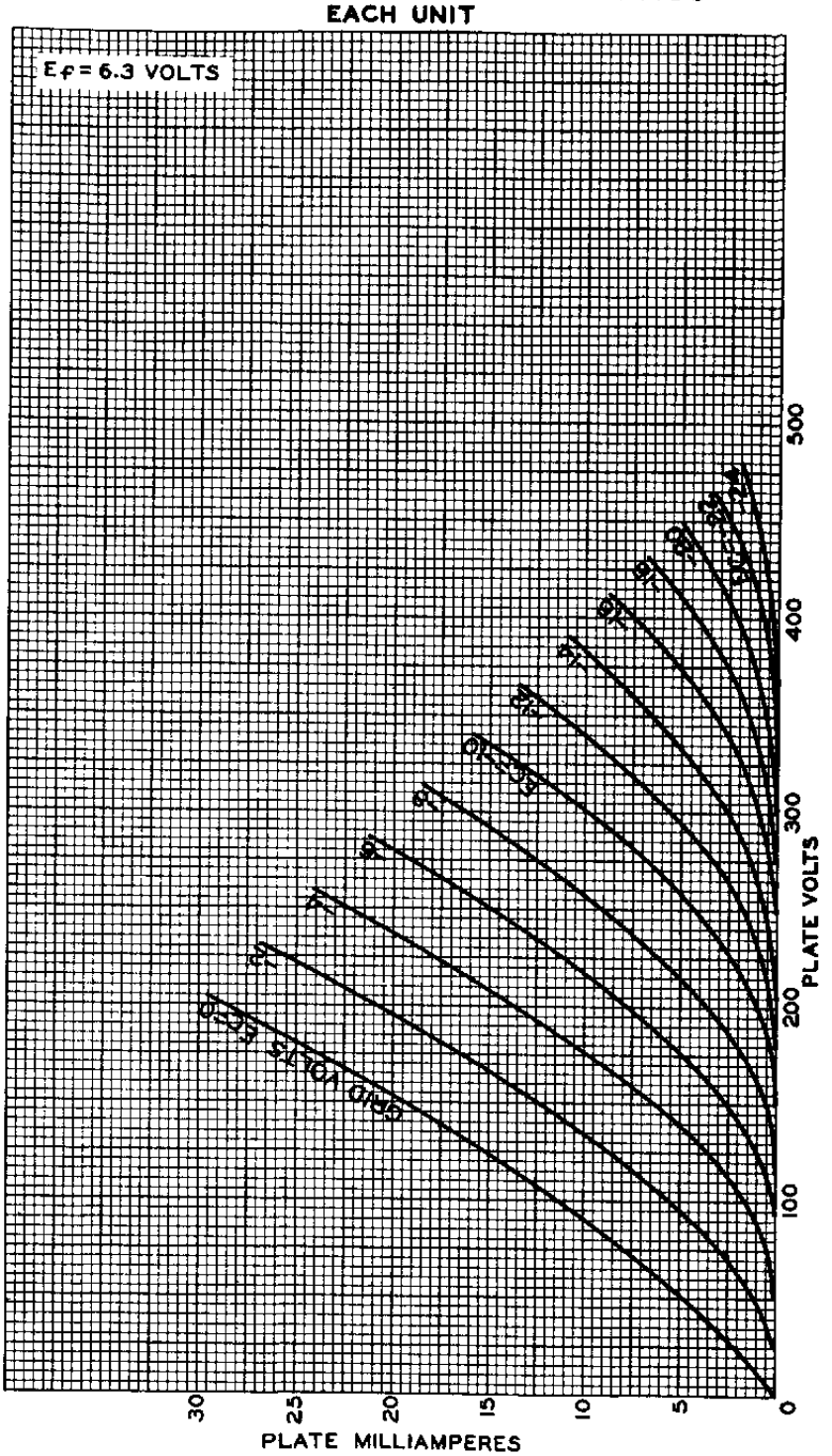
AVERAGE PLATE CHARACTERISTICS

EACH UNIT



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