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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.):⁰

Grid to plate	4	μf
Grid to cathode, internal shield, and heater.	2.3	μf
Plate to cathode, internal shield, and heater.	2.2	μf

Characteristics, Class A₁ 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 A₁

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
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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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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
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- 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

