



6CY7

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# DUAL TRIODE With High-Mu Unit and Low-Mu Unit

9-PIN MINIATURE TYPE

## GENERAL DATA

### Electrical:

Heater, for Unipotential Cathodes:

Voltage (AC or DC) . . . . .	6.3 ± 10%	volts
Current . . . . .	0.75	amp

Direct Interelectrode Capacitances (Approx.):<sup>0</sup>

	Unit No.1	Unit No.2	
Grid to plate . . . . .	1.8	4.4	μf
Grid to cathode and heater. . . . .	1.5	5	μf
Plate to cathode and heater . . . . .	0.3	1	μf

### Characteristics, Class A<sub>1</sub> Amplifier:

	Unit No.1	Unit No.2	
Plate Supply Voltage. . . . .	250	60 150	volts
Grid Voltage. . . . .	-3	0 -	volts
Cathode Resistor. . . . .	-	- 620	ohms
Amplification Factor. . . . .	68	- 5	
Plate Resistance (Approx.). . . . .	52000	- 920	ohms
Transconductance. . . . .	1300	- 5400	μmhos
Plate Current . . . . .	1.2	80* 30	ma
Plate Current for grid volts = -30 . . . . .	-	- 3.5	ma
Grid Voltage (Approx.) for plate μa = 10 . . . . .	-5.5	- -	volts
Grid Voltage (Approx.) for plate μa = 200. . . . .	-	- -40	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. . . . . 9LG

Pin 1 - Plate of Unit No.2

Pin 2 - Internal Connection—Do Not Use

Pin 3 - Grid 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 - Cathode of Unit No.2

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## DUAL TRIODE

With High-Mu Unit and Low-Mu Unit

## VERTICAL-DEFLECTION OSCILLATOR

Values are for Unit No. 1

## Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system<sup>□</sup>

DC PLATE VOLTAGE. . . . .	350	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE. . . . .	400	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 <sup>▲</sup>	max.	volts

## Maximum Circuit Values:

Grid-Circuit Resistance . . . . .	2.2	max.	megohms
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## VERTICAL-DEFLECTION AMPLIFIER

Values are for Unit No. 2

## Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system<sup>□</sup>

DC PLATE VOLTAGE. . . . .	350	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE <sup>#</sup> . . . . .	1800	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE. . . . .	250	max.	volts
CATHODE CURRENT:			
Peak. . . . .	120	max.	ma
Average . . . . .	35	max.	ma
PLATE DISSIPATION . . . . .	5.5	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200 <sup>▲</sup>	max.	volts

## Maximum Circuit Values:

Grid-Circuit Resistance:

For cathode-bias operation. . . . .	2.2	max.	megohms
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<sup>○</sup> Without external shield.<sup>\*</sup> This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.<sup>□</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.<sup>▲</sup> The dc component must not exceed 100 volts.<sup>#</sup> This rating is applicable when the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.