



6CS7

6CS7

# MEDIUM-MU DUAL TRIODE

## With Dissimilar Units

9-PIN MINIATURE TYPE

*Intended for use in equipment having series heater-string arrangement*

### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathodes:

Voltage. . . . .	6.3	ac or dc volts
Current. . . . .	0.6	amp
Warm-up time (Average). . . . .	11	sec

*For definition of heater warm-up time and method of determining it, see sheet HEATER WARM-UP TIME MEASUREMENT at front of this Section.*

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

	Unit No. 1 Oscillator	Unit No. 2 Amplifier	
Grid to plate. . . . .	2.6	2.6	μμf
Grid to cathode and heater..	1.8	3	μμf
Plate to cathode and heater.	0.5	0.5	μμf

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

	Unit No. 1 Oscillator	Unit No. 2 Amplifier	
Plate Voltage. . . . .	250	250	volts
Grid Voltage . . . . .	-8.5	-10.5	volts
Amplification Factor . . . . .	17	15.5	
Plate Resistance (Approx.) . . . . .	7700	3450	ohms
Transconductance . . . . .	2200	4500	μmhos
Plate Current. . . . .	10.5	19	ma
Plate Current for grid volts = -16. . . . .	-	3	ma
Grid Voltage (Approx.) for plate current of:			
10 microamperes. . . . .	-24	-	volts
50 microamperes. . . . .	-	-22	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

<sup>o</sup>: See next page.

6CS7



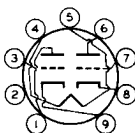
6CS7

## MEDIUM-MU DUAL TRIODE

With Dissimilar Units

Base. . . . . Small-Button Noval 9-Pin (JETEC No.E9-1)  
 Basing Designation for BOTTOM VIEW . . . . . 9EF

Pin 1 - Plate of  
 Unit No.2  
 Pin 2 - No Con-  
 nection  
 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

### VERTICAL-DEFLECTION OSCILLATOR

Values are for Unit No.1

#### Maximum Ratings, Design-Center Values:

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

DC PLATE VOLTAGE. . . . .	500 max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE. . . . .	400 max.	volts
CATHODE CURRENT:		
Peak. . . . .	70 max.	ma
DC. . . . .	20 max.	ma
PLATE DISSIPATION . . . . .	1.25 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 . . . . . 2.2 max. megohms

### VERTICAL-DEFLECTION AMPLIFIER

Values are for Unit No.2

#### Maximum Ratings, Design-Center Values Except as Noted:

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

DC PLATE VOLTAGE. . . . .	500 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE* . . . . .		
(Absolute maximum). . . . .	2200 <sup>■</sup> max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE. . . . .	250 max.	volts
CATHODE CURRENT:		
Peak. . . . .	105 max.	ma
DC. . . . .	30 max.	ma
PLATE DISSIPATION . . . . .	6.5 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

□, ▲, #, ■: See next page.



6CS7

**MEDIUM-MU DUAL TRIODE**  
**With Dissimilar Units**

6CS7

**Maximum Circuit Values:**

Grid-Circuit Resistance. . . . . 2.2 max. megohms

- As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.
- ▲ The dc component must not exceed 100 volts.
- \* This rating is applicable where 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.
- Under no circumstances should this absolute value be exceeded.
- without external shield.