

Dual Triode

With High-Mu Unit and Low-Mu Unit

DUODECAR TYPE

Electrical:

Heater Characteristics and Ratings:

Voltage (AC or DC)	6.3 ± 0.6	volts
Current at 6.3 volts	1.050	amp
Maximum heater-cathode voltage (Each unit):		
Heater negative with respect to cathode:		
Peak	200	volts
Heater positive with respect to cathode:		
Peak	200	volts
DC component	100	volts

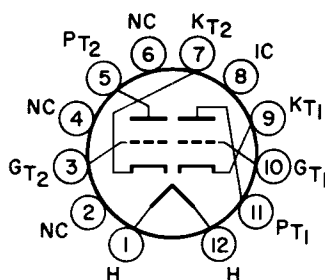
Direct Interelectrode Capacitances (Approx.):^a

	Unit No.1	Unit No.2	
Grid to plate	4.4	9.5	pf
Input: G to (K, H)	2.2	6.5	pf
Output: P to (K, H)	0.4	1.2	pf

Mechanical:

Operating Position	Any
Type of Cathodes	Coated Unipotential
Maximum Overall Length	2.875"
Seated Length	2.250" to 2.500"
Diameter	1.062" to 1.188"
Dimensional Outline (JEDEC 9-60)	See <i>General Section</i>
Bulb	T9
Base	Small-Button Duodecar 12-Pin (JEDEC No. E12-70)
Basing Designation for BOTTOM VIEW	12E0

- Pin 1-Heater
Pin 2-No Internal Connection
Pin 3-Grid of Unit No.2
Pin 4-No Internal Connection
Pin 5-Plate of Unit No.2
Pin 6-No Internal Connection
Pin 7-Cathode of Unit No.2
Pin 8-Do Not Use
Pin 9-Cathode of Unit No.1
Pin 10-Grid of Unit No.1
Pin 11-Plate of Unit No.1
Pin 12-Heater



Characteristics, Class A1 Amplifier:

	Unit No.1	Unit No.2	
Plate Voltage	250	60 150	volts
Grid Voltage	-3	0 ^b -17.5	volts
Amplification Factor	65	-	6
Plate Resistance (Approx.)	40500	-	920 ohms
Transconductance	1600	-	6500 μ hos
Plate Current	1.4	95	35 ma
Plate Current for grid volts = -25	-	-	6 ma
Grid-Voltage for plate μ a = 30	-5.5	-	volts
Grid-Voltage for plate μ a = 50	-	-	-36 volts



VERTICAL DEFLECTION OSCILLATOR AND AMPLIFIER

Maximum Ratings, Design-Maximum Values:*For operation in a 525-line, 30-frame system^c*

	<i>Unit No.1 (Oscillator)</i>	<i>Unit No.2 (Amplifier)</i>	
DC Plate Voltage	330	275	volts
Peak Positive-Pulse Plate Voltage.	—	2000	volts
Peak Negative Pulse-Grid Voltage.	400	250	volts
Cathode Current:			
Peak	70	175	ma
Average.	20	50	ma
Plate Dissipation.	1	7 ^d	watts

Maximum Circuit Values:

Grid-Circuit Resistance. . . .	2.2	2.2	megohms
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^a Without external shield.^b Applied for short interval (2 seconds maximum) so as not to damage tube.^c 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.^d An adequate bias resistor or other means is required to protect the tube in the absence of excitation.