

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

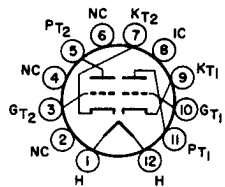
Direct Interelectrode Capacitances (Approx.):^a

	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 μmhos
Plate Current.	1.4	95	35 ma
Plate Current for grid volts = -25	-	-	6 ma
Grid-Voltage for plate μa = 30	-5.5	-	- volts
Grid-Voltage for plate μa = 50	-	-	-36 volts



VERTICAL DEFLECTION OSCILLATOR AND AMPLIFIER

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system^c

	Unit No.1 (Oscillator)	Unit No.2 (Amplifier)	
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 milli-seconds.^d An adequate bias resistor or other means is required to protect the tube in the absence of excitation.