

12AC10-A

Compactron Triple Triode

■ **COLOR TV TYPE**

■ **IMPROVED LINEARITY**

■ **HIGH GAIN**

■ **TRANSCONDUCTANCE = 5,800 MICROMHOS**

■ **AMPLIFICATION FACTOR = 62**

The 12AC10-A is a compactron containing three high- μ triodes. It is designed for use primarily as a color-difference amplifier in color television receivers.

GENERAL

ELECTRICAL

Cathode - Coated Unipotential

Heater Characteristics and Ratings

Heater Voltage, AC or DC *..... 12.6 Volts

Heater Current •..... 0.3 ± 0.02 Amperes

Heater Warm-up Time, Average ♦..... 11 Seconds

Direct Interelectrode Capacitances ▲

Section 1

Section 2

Section 3

Grid to Plate: (g to p) .. 1.3 1.2 1.2 pf

Input: g to (h+k)..... 2.4 2.6 2.6 pf

Output: p to (h+k) ... 0.22 0.30 0.44 pf

MECHANICAL

Operating Position - Any

Envelope - T-9, Glass

Base - E12-70, Button 12-Pin

Outline Drawing - EIA 12-56

Maximum Diameter 1.188 Inches

Minimum Diameter 1.062 Inches

Maximum Over-all Length 1.875 Inches

Maximum Seated Height..... 1.500 Inches

Minimum Seated Height 1.250 Inches

MAXIMUM RATINGS

DESIGN-MAXIMUM VALUES, EACH SECTION

Plate Voltage 330 Volts

Plate Dissipation 2.0 Watts

Heater-Cathode Voltage

Heater Positive with Respect to Cathode

DC Component 100 Volts

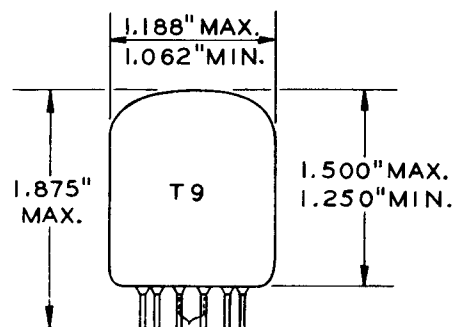
Total DC and Peak 200 Volts

Heater Negative with Respect to Cathode

Total DC and Peak 200 Volts

Grid Circuit Resistance 0.5 Megohms

PHYSICAL DIMENSIONS

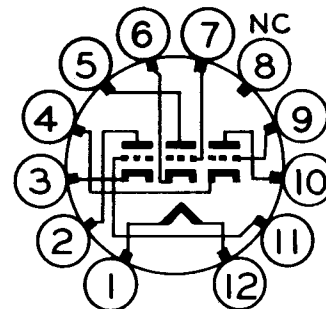


EIA 9-56

TERMINAL CONNECTIONS

- Pin 1 - Heater
- Pin 2 - Plate (Section 3)
- Pin 3 - Cathode (Section 3)
- Pin 4 - Cathode (Section 1)
- Pin 5 - Plate (Section 2)
- Pin 6 - Cathode (Section 2)
- Pin 7 - Grid (Section 2)
- Pin 8 - No Connection
- Pin 9 - Grid (Section 1)
- Pin 10 - Plate (Section 1)
- Pin 11 - Grid (Section 3)
- Pin 12 - Heater

BASING DIAGRAM



EIA 12FE

MAXIMUM RATINGS (Cont'd)

Design-Maximum ratings are limiting values of operating and environmental conditions applicable to a bogey electron tube of a specified type as defined by its published data and should not be exceeded under the worst probable conditions.	The equipment manufacturer should design so that initially and throughout life no design-maximum value for the intended service is exceeded with a bogey tube under the worst probable operating conditions with respect to supply-voltage variation, equipment component variation, equipment control adjustment, load variation, signal variation, environmental conditions, and variations in the characteristics of all other electron devices in the equipment.
The tube manufacturer chooses these values to provide acceptable serviceability of the tube, making allowance for the effects of changes in operating conditions due to variations in the characteristics of the tube under consideration.	

CHARACTERISTICS AND TYPICAL OPERATION

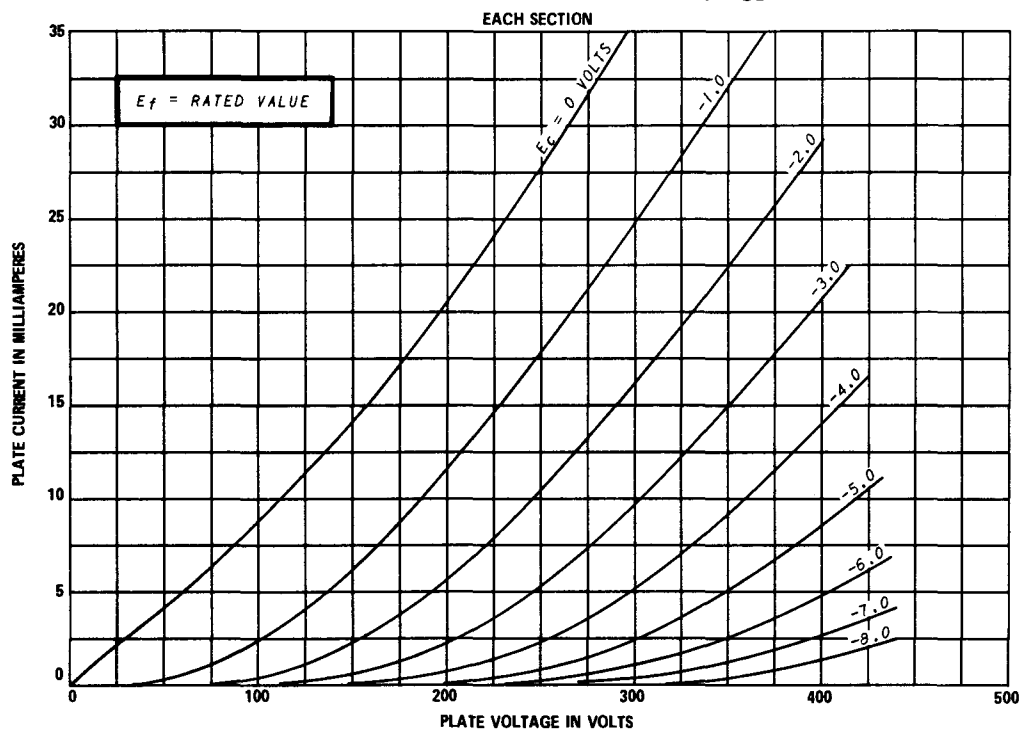
AVERAGE CHARACTERISTICS, EACH SECTION

Plate Voltage	200	Volts
Cathode-Bias Resistor	150	Ohms
Amplification Factor	62	
Plate Resistance, approximate	10,700	Ohms
Transconductance	5,800	Micromhos
Plate Current	9.0	Milliamperes
Grid Voltage, approximate		
Ib = 100 Microamperes	-5	Volts

NOTES

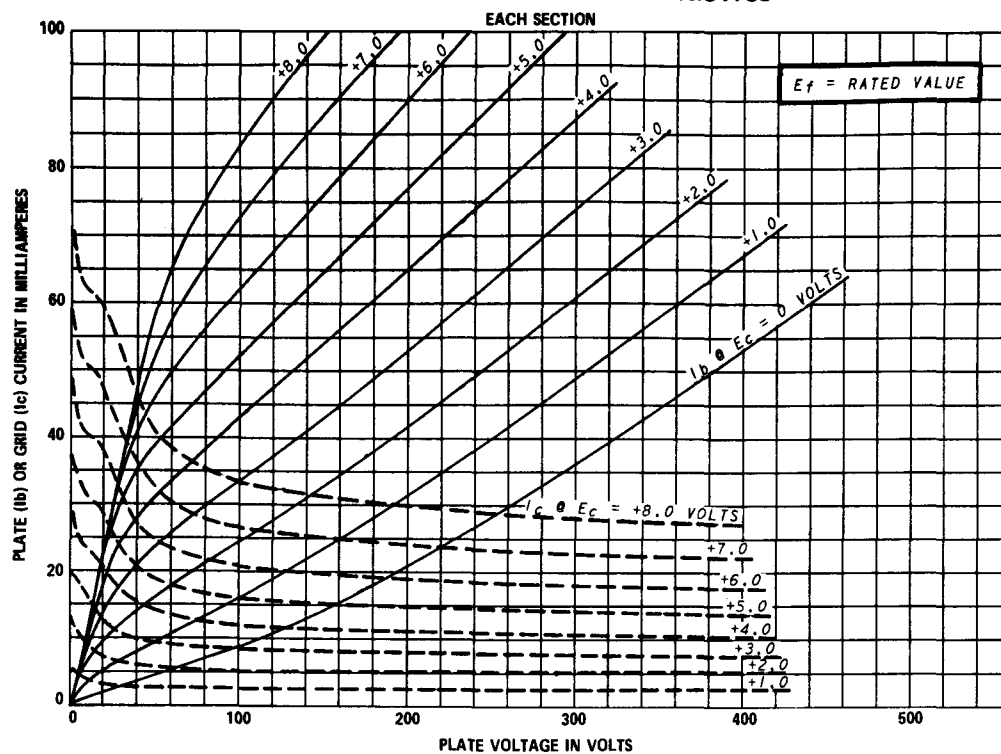
- ★ Heater voltage for a bogey tube at If = 0.3 amperes.
- The equipment designer should design the equipment so that heater current is centered at the specified bogey value, with heater supply variations restricted to maintain heater current within the specified tolerance.
- ◆ The time required for the voltage across the heater to reach 80 percent of the bogey value after applying 4 times the bogey heater voltage to a circuit consisting of the tube heater in series with a resistance equal to 3 times the bogey heater voltage divided by the bogey heater current.
- ▲ Without external shield.

AVERAGE PLATE CHARACTERISTICS



K-55611-TD299-1A

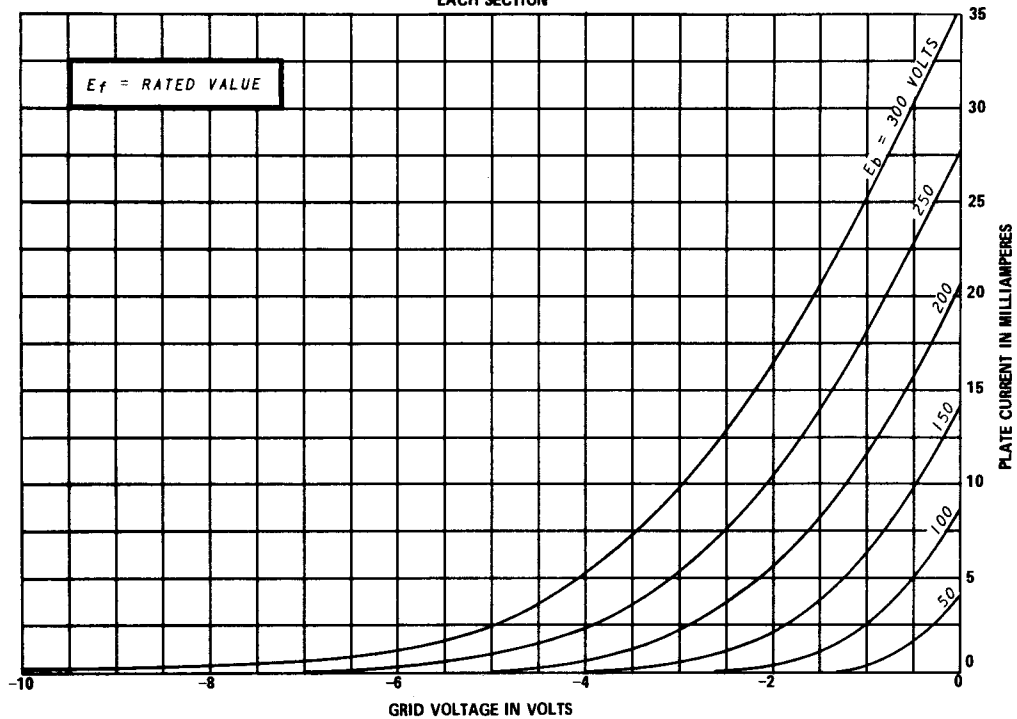
AVERAGE PLATE CHARACTERISTICS



K-55611-TD299-2A

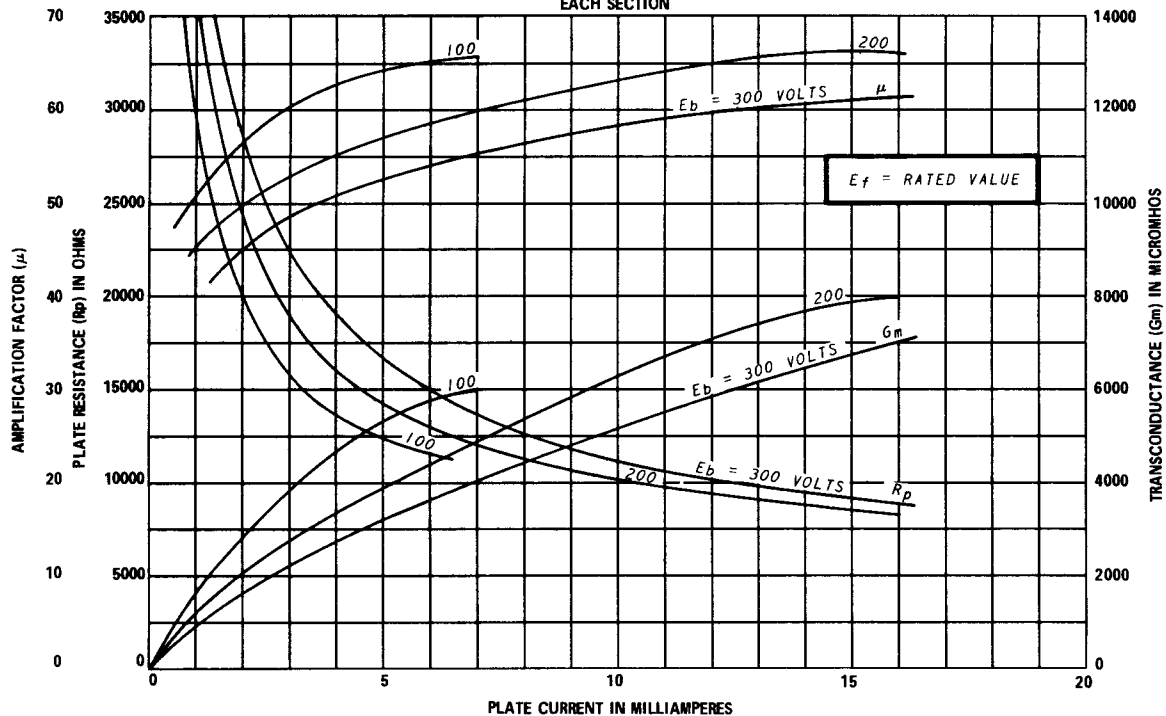
AVERAGE TRANSFER CHARACTERISTICS

EACH SECTION



AVERAGE CHARACTERISTICS

EACH SECTION



GENERAL  ELECTRIC

TUBE PRODUCTS DEPARTMENT
OWENSBORO, KENTUCKY 42301