



COMPACTRON TRIPLE TRIODE

DESCRIPTION AND RATING

The 6AV11 is a compactron containing three medium-mu triodes suitable for general-purpose amplifier, phase inverter, or oscillator applications.

GENERAL

ELECTRICAL

Cathode—Coated Unipotential				
Heater Characteristics and Ratings				
Heater Voltage, AC or DC†	6.3 ± 0.6	Volts		
Heater Current‡	0.6	Amperes		
Direct Interelectrode Capacitances§				
	Section 1	Section 2	Section 3	
Grid to Plate (g to p)	1.2	1.2	1.2	pf
Input: g to (h+k+i.s.)	1.9	1.9	1.9	pf
Output: p to (h+k+i.s.)	1.8	0.7	2.0	pf

MECHANICAL

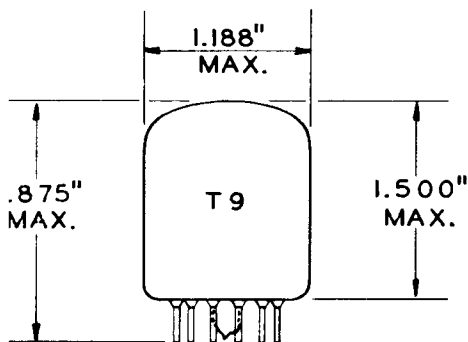
Mounting Position—Any	
Envelope—T-9, Glass	
Base—E12-70, Button 12-Pin	
Outline Drawing—EIA 9-56	
Maximum Diameter	1.188 Inches
Maximum Over-all	
Length	1.875 Inches
Maximum Seated	
Height	1.500 Inches

MAXIMUM RATINGS

DESIGN-MAXIMUM VALUES, EACH SECTION

Plate Voltage	330	Volts	Total DC and Peak	200	Volts
Plate Dissipation	2.75	Watts	Heater Negative with Respect to Cathode		
Total Plate Dissipation, All Plates	6.0	Watts	Total DC and Peak	200	Volts
DC Cathode Current	20	Milliamperes	Grid Circuit Resistance		
Heater-Cathode Voltage			With Fixed Bias	0.25	Megohms
Heater Positive with Respect to Cathode			With Cathode Bias	1.0	Megohms
DC Component		100	Volts		

PHYSICAL DIMENSIONS

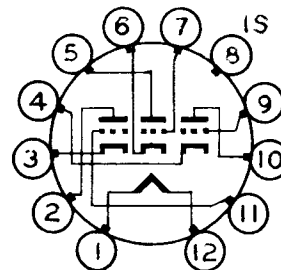


EIA 9-56

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—Internal Shield
- Pin 9—Grid (Section 1)
- Pin 10—Plate (Section 1)
- Pin 11—Grid (Section 3)
- Pin 12—Heater

BASING DIAGRAM



EIA-12BY

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 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.

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.

CHARACTERISTICS AND TYPICAL OPERATION

Average Characteristics, Each Section

Plate Voltage.....	100	250	Volts
Grid Voltage.....	0	-8.5	Volts
Amplification Factor.....	20	17	
Plate Resistance, approximate.....	6500	7700	Ohms
Transconductance.....	3100	2200	Micromhos
Plate Current.....	11.8	10.5	Milliamperes
Grid Voltage, approximate			
I _b = 10 Microamperes.....		-24	Volts

† The equipment designer should design the equipment so that heater voltage is centered at the specified bogey value, with heater supply variations restricted to maintain heater voltage within the specified tolerance.

‡ Heater current of a bogey tube at E_f = 6.3 volts.

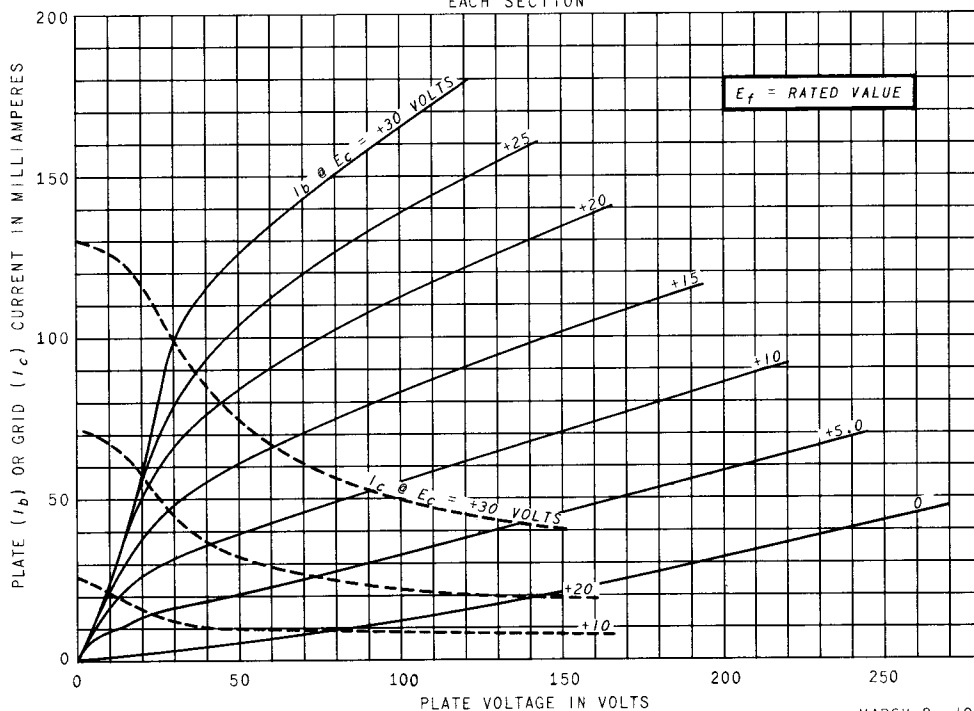
§ Without external shield.

The tubes and arrangements disclosed herein may be covered by patents of General Electric Company or others. Neither the disclosure of any information herein nor the sale of tubes by General Electric Company conveys any license under patent claims covering combinations of tubes with other devices or

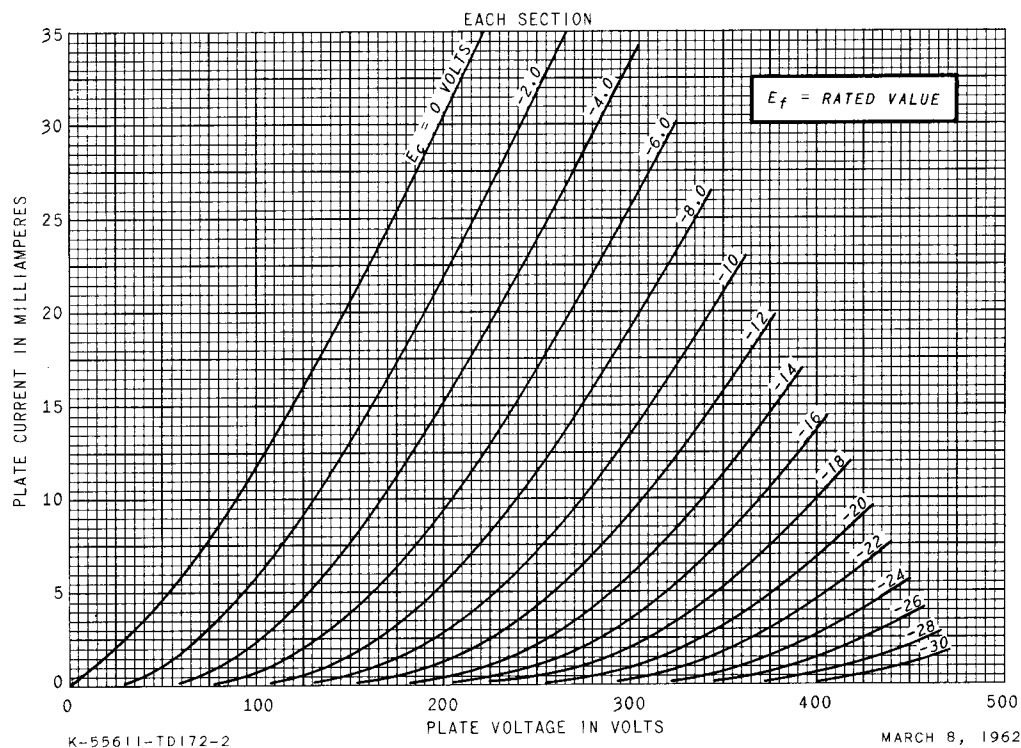
elements. In the absence of an express written agreement to the contrary, General Electric Company assumes no liability for patent infringement arising out of any use of the tubes with other devices or elements by any purchaser of tubes or others.

AVERAGE PLATE CHARACTERISTICS

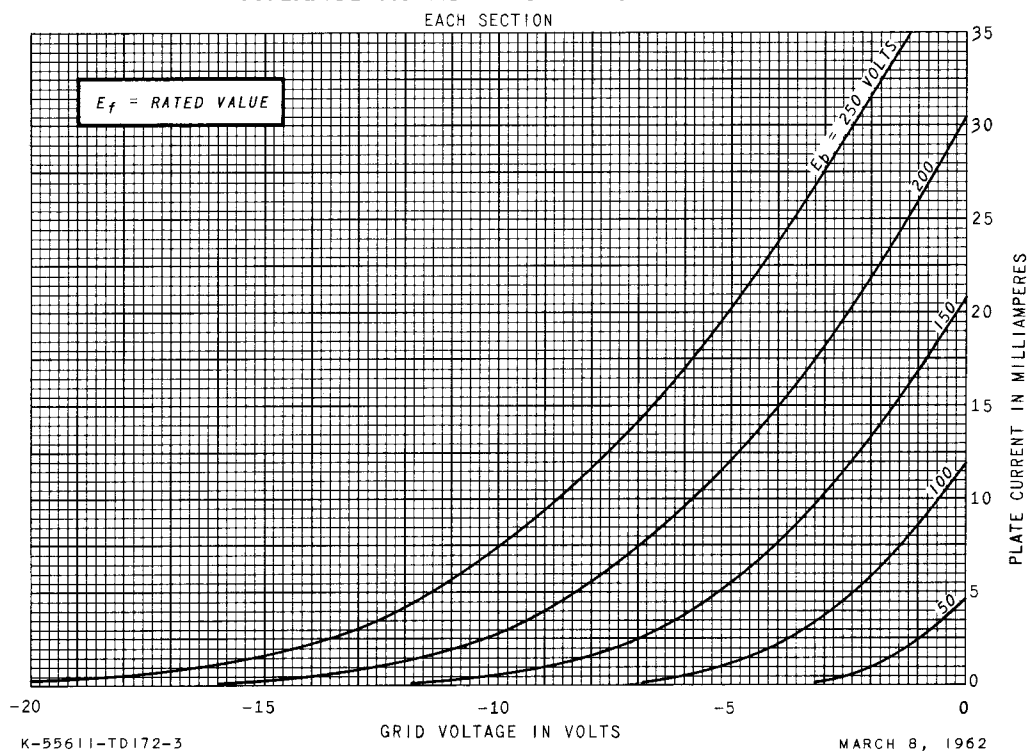
EACH SECTION



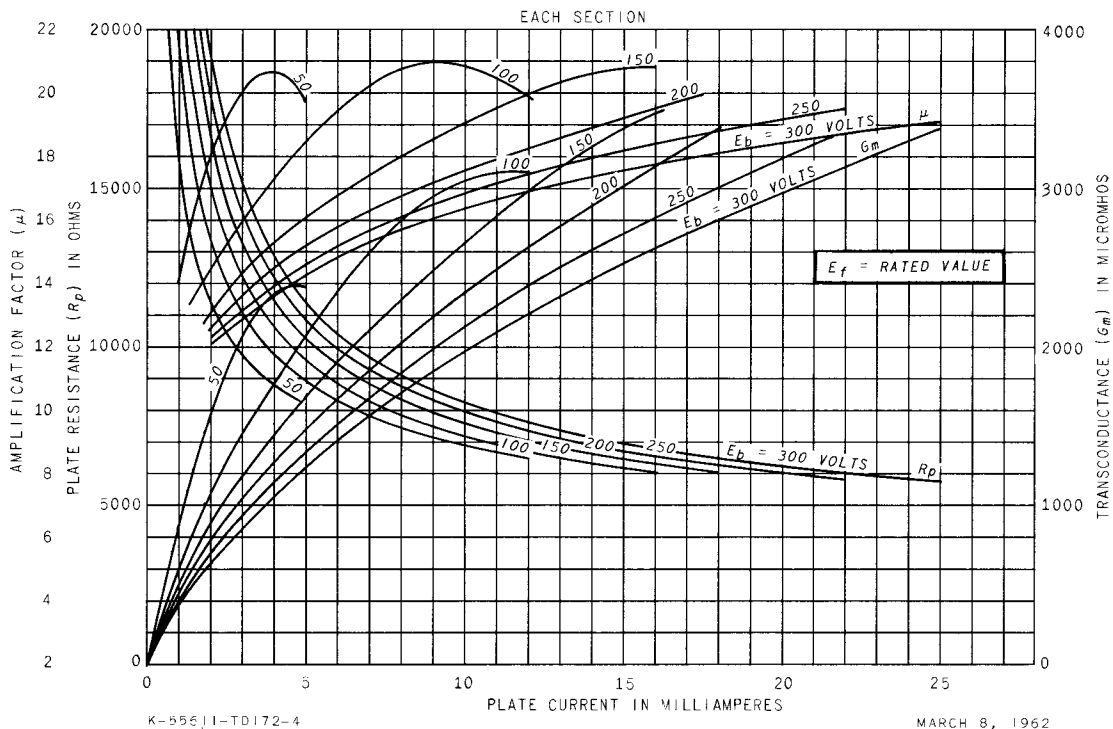
AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE CHARACTERISTICS



RECEIVING TUBE DEPARTMENT



Owensboro, Kentucky