

Color Television Type

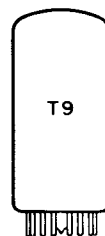
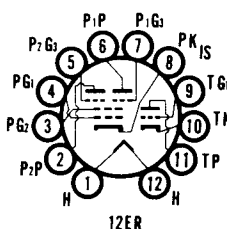
**VERTICAL DEFLECTION OSC. (T)  
SYNC/AGC AMPLIFIER (P)**

**6BA11**

8BA11

**Medium Mu Triode and Twin Pentode**

Construction.....Compactron T-9  
 Base .....Button 12 Pin, E12-70  
 Basing .....12ER  
 Outline .....9-58  
 Maximum Diameter .....1.188 In.  
 Maximum Seated Height .....2.000 In.  
 Maximum Overall Height .....2.375 In.



**ELECTRICAL DATA**

**HEATER OPERATION**

	<b>8BA11</b>	<b>6BA11</b>
Heater Voltage.....	8.4	6.3 Volts
Heater Current .....	450	600 Ma
Heater Warm-up Time .....	11	11 Seconds
Maximum Heater-Cathode Voltage		
Heater Negative with Respect to Cathode		
Total DC and Peak.....		200 Volts
Heater Positive with Respect to Cathode		
DC .....		100 Volts
Total DC and Peak.....		200 Volts

**DIRECT INTERELECTRODE CAPACITANCES (Unshielded)**

**Pentode Section**

Grid No. 3 to Plate (Each Pentode) .....	2.0 Pf
Grid No. 1 to All.....	6.0 Pf
Grid No. 3 (Each Pentode to All) .....	3.6 Pf
Plate (Each Pentode to All) .....	3.0 Pf
Grid No. 3 (Pentode 1) to Grid No. 3 (Pentode 2) (Max.).....	0.026 Pf

**Triode Section**

Grid to Plate .....	2.0 Pf
Input: g1 to (k + h) .....	2.0 Pf
Output: p to (k + h + IS) .....	1.9 Pf

**RATINGS (Design Maximum Rating System)**

	<b>Triode Section</b>	<b>Pentode Section</b>
Plate Voltage .....	300	300 Volts
Grid No. 2 Voltage .....	—	150 Volts
Positive DC Grid No. 3 Voltage .....	—	3.0 Volts
Negative DC Grid No. 3 Voltage .....	—	50 Volts
Peak Positive Grid No. 3 Voltage.....	—	50 Volts

Negative DC Grid No. 1 Voltage .....	—	50 Volts
Plate Dissipation (Each Plate) .....	1.5	1.1 Watts
Grid No. 2 Dissipation .....	—	0.75 Watt
DC Cathode Current .....	20	12 Ma
Grid No. 3 Circuit Resistance (Each Grid).....	—	0.5 Megohm
Grid No. 1 Circuit Resistance		
Fixed Bias .....	0.25	0.5 Megohm
Cathode Bias .....	1.0	0.5 Megohm

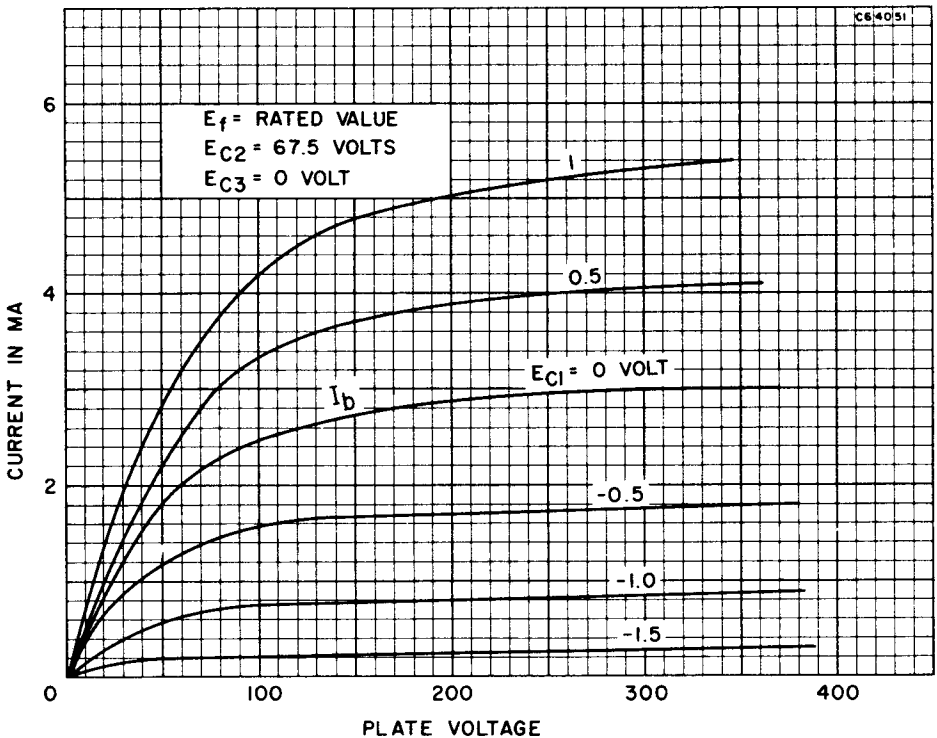
**CHARACTERISTICS AND TYPICAL OPERATION**

	Pentode				
	Triode Section	Each Section Separately <sup>(2)</sup>		Both Sections Operating <sup>(3)</sup>	
Plate Voltage .....	250	100	100	100	100 Volts
Grid No. 2 Voltage .....	—	67.5	67.5	67.5	67.5 Volts
Grid No. 3 Voltage .....	—	0	0	-10	0 Volts
Grid No. 1 Voltage .....	-11	0	Note 1	Note 1	Note 1 Volts
Plate Current .....	5.0	—	2.5	0	2.5 Ma
Grid No. 2 Current .....	—	—	—	7.0	4.4 Ma
Grid No. 1 Transconductance ...	1800	1700	—	—	— $\mu$ mhos
Amplification Factor .....	18	—	—	—	—
Grid No. 3 Transconductance ...	—	—	450	—	— $\mu$ mhos
Grid No. 1 Voltage					
I <sub>b</sub> = 100 $\mu$ a .....	-18	2.3	—	—	— Volts
Grid No. 3 Voltage (Approx.)					
For I <sub>b</sub> = 100 $\mu$ a.....	—	—	-3.2	—	— Volts

**NOTES:**

- (1) Grid current adjusted for 100  $\mu$ a DC.
- (2) Plate and Grid No. 3 of opposite section grounded.
- (3) Voltages and plate current apply to each section.

**AVERAGE PLATE CHARACTERISTICS  
(Pentode Section)  
(with Opposite Grid No. 3 and Plate Grounded)**



### AVERAGE PLATE CHARACTERISTICS (Triode Section)

