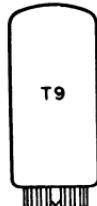
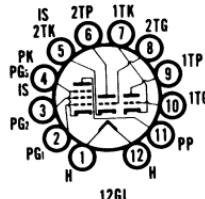


**VIDEO AMPLIFIER (P)
GENERAL PURPOSE AMPLIFIER (T)
SYNC SEPARATOR (T)**

14BR11

**High Mu Triode, Medium Mu Triode
and Sharp Cutoff Pentode**

Construction Compactron T-9
 Base Button 12 Pin, E12-70
 Basing 12GL
 Outline 9-59
 Maximum Diameter 1.188 In.
 Maximum Seated Height 2.250 In.
 Maximum Overall Height 2.625 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	14.2 Volts
Heater Current	450 Ma
Heater Warm-up Time	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)

Triode (Section 1)

Grid to Plate	1.9 Pf
Input: 1Tg to (1Tk + 2Tk + Pk + Pg3 + h + IS)	2.4 Pf
Output: 1Tp to (1Tk + 2Tk + Pk + Pg3 + h + IS)	2.2 Pf

Triode (Section 2)

Grid to Plate	3.8 Pf
Input: 2Tg to (2Tk + Pk + Pg3 + h + IS)	2.8 Pf
Output: 2Tp to (2Tk + Pk + Pg3 + h + IS)	3.8 Pf

Pentode Section

Grid No. 1 to Plate	0.13 Pf
Input: Pg1 to (2Tk + Pk + Pg2 + Pg3 + h + IS)	10 Pf
Output: Pp to (2Tk + Pk + Pg2 + Pg3 + h + IS)	4.6 Pf

Coupling

Pentode Plate to Triode Plate (Section 2) (Max.)	0.16 Pf
Triode Plate (Section 1) to Triode Plate (Section 2)	0.2 Pf

RATINGS (Design Maximum Rating System)**Pentode Section**

Plate Voltage	330 Volts
Screen Supply Voltage	330 Volts
Screen Voltage	See Rating Chart (Gen. Info. Sec.)
Positive DC Grid No. 1 Voltage	0 Volt
Plate Dissipation	4.0 Watts
Screen Dissipation	1.1 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias	1.0 Megohm
Cathode Bias	1.0 Megohm

Triode (Section 1)

Plate Voltage	330 Volts
Positive DC Grid Voltage	0 Volt
Plate Dissipation	1.5 Watts
Grid Circuit Resistance	
Fixed Bias	0.5 Megohm
Cathode Bias	1.0 Megohm

Triode (Section 2)

Plate Voltage	330 Volts
Positive DC Grid Voltage	0 Volt
Plate Dissipation	2.0 Watts
Grid Circuit Resistance	
Fixed Bias	0.5 Megohm
Cathode Bias	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Pentode Section**

Plate Voltage	35	135 Volts
Screen Voltage.....	135	135 Volts
Grid No. 1 Voltage	0	— Volt
Cathode Bias Resistor	—	100 Ohms
Plate Resistance (Approx.)	—	45,000 Ohms
Transconductance	—	10,400 μ mhos
Plate Current	34	17 Ma
Screen Current	13	4.0 Ma
Grid No. 1 Voltage (Approx.)		
$I_b = 100 \mu A$	—	-6 Volts

Triode (Section 1)

Plate Voltage	200 Volts
Grid Voltage	-2.0 Volts
Amplification Factor	68
Plate Resistance (Approx.)	12,400 Ohms
Transconductance	5500 μ mhos
Plate Current	7.0 Ma
Grid Voltage (Approx.)	
$I_b = 100 \mu A$	-5.5 Volts

Triode (Section 2)

Plate Voltage	200 Volts
Cathode Bias Resistor	220 Ohms
Amplification Factor	41
Plate Resistance (Approx.)	9400 Ohms
Transconductance	4400 μ mhos
Plate Current	9.2 Ma
Grid Voltage (Approx.)	
$I_b = 100 \mu A$	-6.5 Volts