DIRECT INTERELECTRODE CAPACITANCES

	Shielded(1)	Unshielded
Grid No. 1 to Plate (Max.)	0.0035	0.0035 Pf
Input	5.5	5.5 Pf
Output	5.5	5.0 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)	330 Volts
Grid No. 2 Supply Voltage (Max.)	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)
Plate Dissipation (Max.)	3.4 Watts
Grid No. 2 Dissipation (Max.)	0.7 Watt
Negative Grid No. 1 Voltage (Max.)	55 Volts
Positive Grid No. 1 Voltage (Max.)	0 Volt

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	100	250 Volts
Grid No. 3 Voltage	Connected to Cathode at Socket	
Grid No. 2 Voltage	100	100 Volts
Cathode Bias Resistor	68	68 Ohms
Plate Resistance (Approx.)	0.25	1.0 Megohm
Transconductance	4300	4200 μmhos
Plate Current	10.8	11.0 Ma
Grid No. 2 Current	4.4	4.2 Ma
Grid No. 1 Voltage for Gm = 40 μmhos	−20	−20 Volts

NOTE:

(1) External Shield No. 316 Connected to Pin 7 (cathode).

6BA8A

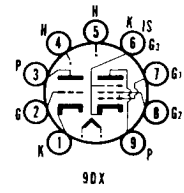
8BA8A

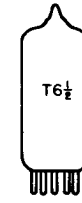
Color Television Type

SYNC SEPARATOR/CLIPPER (T) VIDEO AMPLIFIER (P)

Medium Mu Triode and Sharp Cutoff Pentode

Construction	Miniature T-6½
Base	Button 9 Pin, E9-1
Basing	9DX
Outline	6-3
Maximum Diameter	0.875 In.
Maximum Seated Height	2.375 In.
Maximum Overall Height	2.625 In.





ELECTRICAL DATA

HEATER OPERATION

	8BA8A	6BA8A
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

Triode

	Shielded(1)	Unshielded
Grid to Plate: (g to p)	2.2	2.2 Pf
Input: g to (h + k)	2.7	2.5 Pf
Output: p to (h + k)	1.9	0.4 Pf
Pentode		
Grid to Plate: (g1 to p) (Max.)	0.05	0.06 Pf
Input: g1 to (h + k + g2 + g3 + IS)	10.0	10.0 Pf
Output: p to (h + k + g2 + g3 + IS)	4.5	3.6 Pf
Coupling		
Pentode Grid No. 1 to Triode Plate (Max.)	0.003	0.006 Pf
Pentode Plate to Triode Grid (Max.)	0.006	0.016 Pf
Pentode Plate to Triode Plate (Max.)	0.023	0.150 Pf

RATINGS (Design Center Rating System)

	Triode	Pentode
Plate Voltage (Max.)	300	300 Volts
Grid No. 2 Supply Voltage (Max.)	—	300 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation (Max.)	2.0	3.25 Watts
Grid No. 2 Dissipation (Max.)	—	1.0 Watt
Negative Grid No. 1 Voltage (Max.)	—	50 Volts

Positive Grid No. 1 Voltage (Max.)	—	0 Volt
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.5	0.25 Megohm
Self Bias (Max.)	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

	Triode	Pentode
Plate Voltage	200	200 Volts
Grid No. 2 Voltage	—	150 Volts
Grid No. 1 Voltage	–8	0 Volts
Cathode Bias Resistor	—	180 Ohms
Plate Current	8.0	13 Ma
Grid No. 2 Current	—	3.5 Ma
Transconductance	2700	9000 μmhos
Amplification Factor	18	—
Plate Resistance (Approx.)	6700	400,000 Ohms
Grid No. 1 Voltage for Ib = 10 μa (Approx.)	–16	–10 Volts

INSTANTANEOUS PLATE KNEE VALUES

Eb = 65 V, Ec2 = 150 V, and Ec1 = 0 V;
Ib = 42 Ma; and Ic2 = 12.5 Ma

NOTE:

(1) Shield No. 315 ties to cathode base pin of section under test.

Color Television Type

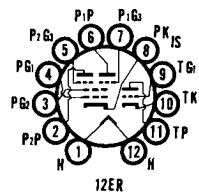
VERTICAL DEFLECTION OSC. (T) SYNC/AGC AMPLIFIER (P)

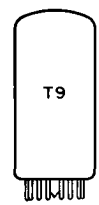
6BA11

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

	8BA11	6BA11
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)

	Triode Section	Pentode Section
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