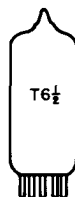
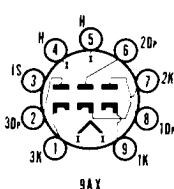


6BC7

Color Television Type

**DC RESTORER or FM DISCRIMINATOR
or AM DETECTOR****Triple Diode**

Construction Miniature T-6½
 Base Button 9 Pin, E9-1
 Basing 9AX
 Outline 6-2
 Maximum Diameter 0.875 In.
 Maximum Seated Height 1.938 In.
 Maximum Overall Height 2.188 In.

**ELECTRICAL DATA****HEATER OPERATION**

Heater Voltage.....	6.3 Volts
Heater Current	450 Ma
Maximum Heater-Cathode Voltage	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Plate Diode No. 1 to All Other Elements	3.5 Pf
Plate Diode No. 2 to All Other Elements	5.5 Pf
Plate Diode No. 3 to All Other Elements	3.5 Pf

RATINGS (Design Center Rating System) (Each Section)

Peak Inverse Plate Voltage (Max.)	330 Volts
DC Output Current (Max.)	12 Ma
Peak Plate Current (Max.)	54 Ma

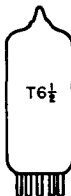
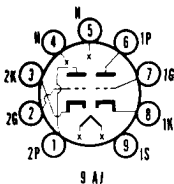
6BC8

4BC8

Color Television Type

VHF CASCODE AMPLIFIER**Medium Mu, Semi-Remote
Cutoff Twin Triode**

Construction Miniature T-6½
 Base Button 9 Pin, E9-1
 Basing 9AJ
 Outline 6-2
 Maximum Diameter 0.875 In.
 Maximum Seated Height 1.938 In.
 Maximum Overall Height 2.188 In.

**ELECTRICAL DATA****HEATER OPERATION**

Heater Voltage.....	4BC8 4.2	6BC8 6.3 Volts
Heater Current	600	400 Ma
Heater Warm-up Time	11	— Seconds

Maximum Heater-Cathode Voltage

Heater Negative with Respect to Cathode ⁽¹⁾ Total DC and Peak.....	200 Volts
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Heater Positive with Respect to Cathode DC	100 Volts
Total DC and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)⁽²⁾

	Section 1	Section 2
Grid to Plate	1.2	1.2 Pf
Input	2.6	5.5 Pf
Output	1.3	2.4 Pf
Heater to Cathode	2.8	2.8 Pf
Plate Section No. 1 to Plate Section No. 2.....		Pf
Grid Section No. 1 to Grid Section No. 2 (Max.)		Pf

RATINGS (Design Maximum Rating System) (Each Section)

Plate Voltage (Max.) ⁽¹⁾	250 Volts
Plate Dissipation (Max.)	2.2 Watts
Cathode Current (Max.)	22 Ma
Grid Circuit Resistance (Max.)	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION (Each Section)**Class A1 Amplifier**

Plate Voltage	150 Volts
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Grid Voltage	0 Volt
Cathode Bias Resistor	220 Ohms
Plate Current	10 Ma
Transconductance	6200 μ mhos
Plate Resistance	5300 Ohms
Amplification Factor	35
Grid Voltage for Gm = 50 μ mhos (Approx.)	-13 Volts

NOTES:

- (1) This rating may be as high as 300 volts max. under cutoff conditions when the tube is used as a cascode amplifier and the two sections are connected in series.
(2) Shield No. 315.

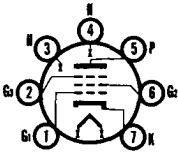
RF/IF AMPLIFIER

6BD6

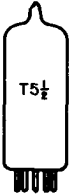
12BD6

Remote Cutoff Pentode

Construction	Miniature T-5½
Base	Button 7 Pin, E7-1
Basing	.7BK
Outline	5-2
Maximum Diameter	0.750 In.
Maximum Seated Height	1.875 In.
Maximum Overall Height	2.125 In.



7BK



T5½

**ELECTRICAL DATA
HEATER OPERATION**

Heater Voltage	
Heater Current	
Maximum Heater-Cathode Voltage	

12BD6

12.6
150

6BD6

6.3 Volts
300 Ma
90 Volts

DIRECT INTERELECTRODE CAPACITANCES

Grid to Plate (Max.)	
Input	
Output	

Shielded (1)

0.005
4.3
5.0

Unshielded

0.004 Pf
4.3 Pf
5.0 Pf

RATINGS (Design Center Rating System)

Plate Voltage (Max.)	
Grid No. 2 Voltage (Max.)	
Plate Dissipation (Max.)	
Grid No. 2 Dissipation (Max.)	
Cathode Current (Max.)	

300 Volts
125 Volts
4.0 Watts
0.4 Watt
14 Ma

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

Plate Voltage	
Grid No. 3 Voltage	
Grid No. 2 Voltage	
Grid No. 1 Voltage	
Plate Current	
Grid No. 2 Current	
Transconductance	
Plate Resistance	
Ec1 for Gm = 10 μ mhos (Approx.)	

100

(Connected to Cathode at Socket)

100

-1

13

5

2350

0.12

-35

250 Volts

100 Volts

-3 Volts

9 Ma

3.5 Ma

2000 μ mhos

0.7 Megohm

-35 Volts

NOTE:

- (1) With external Shield No. 316 connected to pin 7 (cathode).

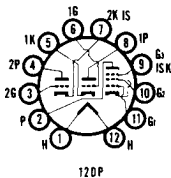
**GENERAL PURPOSE AMPLIFIER (T)
SYNC SEPARATOR (T)
VIDEO AMPLIFIER (P)**

6BD11

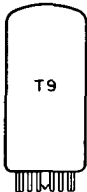
15BD11, 15BD11A

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

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



12DP



T9