

DC Output Current (Each Plate) (Max.)	105 Ma
Steady State Peak Plate Current (Each Plate) (Max.)	1075 Ma
Transient Peak Plate Current (Each Plate) (Max.) ⁽³⁾	525 Ma

CHARACTERISTICS AND TYPICAL OPERATION

Full-Wave Rectifier—Capacitor Input Filter

AC Plate Supply Voltage (Each Plate, RMS) ⁽⁴⁾	300	400 Volts
Filter Input Capacitor	40	40 μ f
Effective Plate Supply Resistance (Each Plate)	30	50 Ohms
DC Output Current	350	325 Ma
DC Output Voltage at Filter Input	275	395 Volts

Full-Wave Rectifier—Choke Input Filter

AC Plate Supply Voltage (Each Plate, RMS) ⁽⁴⁾	500 Volts
Filter Input Choke	10 Henrys
DC Output Current	325 Ma
DC Output Voltage at Filter Input	395 Volts
Tube Voltage Drop for Ib = 350 Ma Each Plate	50 Volts

NOTES:

- (1) Horizontal operation is permitted if Pins 2 and 4 are in a vertical plane.
- (2) For use with sinusoidal supply voltages within the frequency range of 25 to 1000 Hertz.
- (3) Maximum duration 0.2 second.
- (4) AC plate voltage is measured without load.

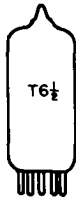
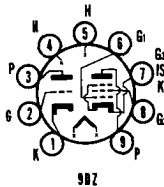
Color Television Type

**IF/VIDEO/AGC AMP (Triode)
OSC/SYNC SEP. (Pentode)**

5AV8

**Medium Mu Triode and
Sharp Cutoff Pentode**

Construction	Miniature T-6½
Base	Button 9 Pin
Basing	9DZ
Outline	6-2
Maximum Diameter	0.875 In.
Maximum Seated Height	1.937 In.
Maximum Overall Height	2.187 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	4.7 Volts
Heater Current	600 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

Grid to Plate	1.5 Pf
Input: g to (h + k)	2.0 Pf
Output: p to (h + k)	0.34 Pf

Pentode Section

Grid No. 1 to Plate (Max.)	0.04 Pf
Input: g1 to (h + k + g2 + g3 + I.S.)	7.0 Pf
Output: p to (h + k + g2 + g3 + I.S.)	3.0 Pf

Coupling

Triode Grid to Pentode Plate (Max.)	0.02 Pf
Pentode Grid No. 1 to Triode Plate (Max.)	0.02 Pf
Pentode Plate to Triode Plate (Max.)	0.15 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	330	330 Volts
Grid No. 2 Supply Voltage (Max.)	—	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Grid No. 1 Voltage		
Positive Bias Value (Max.)	0	0 Volt
Plate Dissipation (Max.)	2.8	2.3 Watts

Grid No. 2 Input (Max.)	—	0.55 Watts
Grid No. 1 Circuit Resistance ⁽¹⁾		
Fixed Bias (Max.)	0.5	0.25 Megohms
Cathode Bias (Max.)	1.0	1.0 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

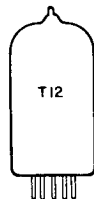
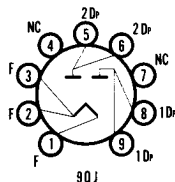
	Triode Section	Pentode Section
Plate Supply Voltage.....	150	125 Volts
Grid No. 2 Supply Voltage.....	—	125 Volts
Grid No. 1 Voltage	-3	— Volts
Cathode Bias Resistor	—	56 Ohms
Plate Current	15	12 Ma
Grid No. 2 Current	—	3.8 Ma
Transconductance	4500	7800 μ mhos
Amplification Factor	21	—
Plate Resistance (Approx.)	4700	170,000 Ohms
Ec1 for Ib = 20 μ a (Approx.).....	-17	-6 Volts
Ib with Ec1 = -3 Volts, RK = 0	—	1.6 Ma

NOTE:

- (1) If either section is operating at maximum rated conditions, the grid No. 1 circuit resistance for both sections should not exceed the stated values.

5BC3**FULL-WAVE POWER RECTIFIER****Filamentary Twin Diode**

Construction Novar T-12
 Base Large Button 9-Pin, E9-76
 Basing^(1,2) 9QJ
 Outline
 Maximum Diameter 1.563 In.
 Maximum Seated Height 3.780 In.
 Maximum Overall Height 4.160 In.

**ELECTRICAL DATA****FILAMENT OPERATION**

Filament Voltage.....	5.0 Volts
Filament Current	3000 Ma

RATINGS (Design Maximum Rating System)**Rectifier Service⁽³⁾**

Peak Inverse Plate Voltage (Max.)	1700 Volts
AC Plate Supply Voltage (Each Plate, RMS) (Max.)	600 Volts
Steady State Peak Plate Current (Each Plate) (Max.)	1000 Ma
Transient Peak Plate Current (Each Plate) (Max.)	5000 Ma

CHARACTERISTICS AND TYPICAL OPERATION**Full-Wave Rectifier—Capacitor Input Filter**

AC Plate Supply Voltage (Each Plate, RMS) ⁽⁴⁾	300	450	550 Volts
Filter Input Capacitor.....	40	40	40 μ f
Effective Plate Supply Resistance (Each Plate)	21	67	97 Ohms
DC Output Current.....	150-300	137.5-275	81-162 Ma
DC Output Voltage at Filter Input	335-290	520-460	680-630 Volts

Full-Wave Rectifier—Choke Input Filter

AC Plate Supply Voltage (Each Plate, RMS) ⁽⁴⁾	450	550 Volts
Filter Input Choke.....	10	10 Henrys
DC Output Current	174-348	137.5-275 Ma
DC Output Voltage at Filter Input	355-340	455-440 Volts
Tube Voltage Drop for Ib = 275 Ma.....	—	47 Volts

NOTES:

- (1) Horizontal operation is permitted if Pins 2 and 7 are in a vertical plane.
- (2) Pins 4 and 7 may be used as tie points for AC line providing peak value does not exceed 200 volts.
- (3) For use with sinusoidal supply voltages within the frequency range of 25 to 1000 hertz.
- (4) AC plate voltage is measured without load.