

Peak Positive Pulse Plate Voltage (Max.) ⁽¹⁾	6500 Volts
Peak Negative Pulse Plate Voltage (Max.) ⁽¹⁾	1650 Volts
Grid No. 3 Voltage (Max.)	70 Volts
Grid No. 2 Voltage (Max.)	275 Volts
Grid No. 2 Voltage without Grid No. 2 Current (Max.)	600 Volts
Peak Negative Pulse Grid No. 1 Voltage (Max.)	330 Volts
Plate Dissipation (Max.)	17 Watts
Grid No. 2 Dissipation	See Rating Chart (Gen. Info. Sec.)
Cathode Current DC (Max.)	275 Ma
Grid No. 1 Circuit Resistance (Max.)	0.5 Megohm
Grid No. 1 Circuit Resistance for Horizontal Deflection Amplifier Circuit Only (Max.)	2.2 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	40	50 Volts
Grid No. 3 Voltage ⁽³⁾	0	0 Volt
Grid No. 2 Voltage	135	200 Volts
Grid No. 2 Circuit Resistance ⁽²⁾	820	0 Ohms
Grid No. 1 Voltage	0	-12 Volts
Plate Current	450	550 ⁽⁴⁾ Ma
Grid No. 2 Current	35	50 ⁽⁴⁾ Ma

NOTES:

- (1) For application in horizontal deflection amplifiers circuits where the maximum pulse duration is 22% of a cycle with a maximum of 18 μ sec.
- (2) To prevent an excessive maximum grid No. 2 dissipation value, during the heating-up period the following minimum values of grid No. 2 circuit resistance are required:

Grid No. 2 Supply Voltage (Volts)	Grid No. 2 Circuit Resistance (Ohms)
135	820
170	1200
230	2200
- (3) In case that an optimum suppression of Barkhausen oscillations and/or snivets is required the Grid No. 3 may be connected to a positive voltage of about 15 to 40 volts. It should, however, be noted that the current to Grid No. 3 is dependent upon the plate load of tube and may vary between 1 and 4 Ma.
- (4) This value can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.

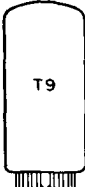
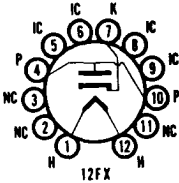
DAMPER

22BW3

6BW3, 17BW3

Heater-Cathode Diode

Construction	 Compactron T-9
Base	 Button 12 Pin E12-70
Basing	 12FX
Outline	 9-60
Maximum Diameter	 1.188 In.
Maximum Seated Height	 2.500 In.
Maximum Overall Height	 2.875 In.



ELECTRICAL DATA

HEATER OPERATION

	6BW3	17BW3	22BW3
Heater Voltage	6.3	16.8	22.4 Volts
Heater Current	1600	600	450 Ma
Heater Warm-up Time	—	11	11 Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
DC			900 Volts
Total DC and Peak			5000 Volts
Heater Positive with Respect to Cathode			
DC			100 Volts
Total DC and Peak			300 Volts

DIRECT INTERELECTRODE CAPACITANCES (Unshielded)

Heater to Cathode	3.8 Pf
Plate to Cathode and Heater	6.0 Pf
Cathode to Plate and Heater	8.5 Pf

RATINGS (Design Maximum Rating System)

Damper Service

Peak Inverse Plate Voltage (Max.) ⁽¹⁾	5000 Volts
Plate Dissipation (Max.)	6.5 Watts
Steady State Peak Current (Max.)	1100 Ma
DC Plate Current (Max.)	175 Ma

NOTE:

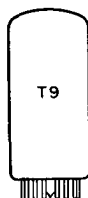
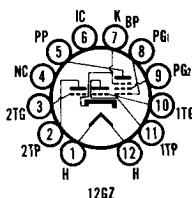
- (1) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.

23Z9

**VERTICAL DEFLECTION AMP. (P)
VERTICAL DEFLECTION OSC. (T)
GENERAL PURPOSE AMPLIFIER (T)**

**Medium Mu Triode, High Mu Triode
and Beam Power Pentode**

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

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

Heater Voltage.....	23 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	3.0 Pf
Input: 1Tg to (h + k + Pbp)	3.0 Pf
Output: 1Tp to (h + k + Pbp)	0.4 Pf

Triode (Section 2)

Grid to Plate	3.8 Pf
Input: 2Tg to (h + k + Pbp)	2.0 Pf
Output: 2Tp to (h + k + Pbp)	0.44 Pf

RATINGS (Design Maximum Rating System)**Pentode Section—Vertical Deflection Amplifier Service⁽¹⁾**

DC Plate Voltage (Max.)	250 Volts
Peak Pulse Plate Voltage (Max.)	2000 Volts
Screen Voltage (Max.)	200 Volts
Peak Negative Grid No. 1 Voltage (Max.)	150 Volts
Plate Dissipation (Max.)	7.0 Watts
Screen Dissipation (Max.)	1.8 Watts
Total DC Plate and Screen Current (Max.)	70 Ma
Total Peak Plate and Screen Current (Max.)	245 Ma
Grid No. 1 Circuit Resistance	
Fixed Bias	1.0 Megohm

Triode Section 1

Plate Voltage (Max.)	330 Volts
Positive DC Grid Voltage (Max.)	0 Volt
Plate Dissipation (Max.)	1.25 Watts
Grid Circuit Resistance	
Fixed Bias (Max.)	0.5 Megohm

Triode Section 2—Vertical Oscillator Service⁽¹⁾

DC Plate Voltage (Max.)	250 Volts
Peak Negative Grid Voltage (Max.)	400 Volts
Plate Dissipation (Max.)	1.0 Watt
DC Plate Current (Max.)	20 Ma
Peak Plate Current (Max.)	70 Ma
Grid Circuit Resistance	
Fixed Bias (Max.)	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION**Pentode Section**

Plate Voltage	45	120 Volts
Screen Voltage.....	110	110 Volts