Triode Section	
G1 to All Elements (Except Plate)	4.0 Pf
Plate to All Elements (Except Grid No. 1)	2.3 Pf
Plate to Grid No. 1	2.7 Pf
Grid to Heater (Max.)	0.1 Pf
Coupling	
Triode Plate to Pentode Grid No. 1 (Max.)	0.01 Pf
Triode Grid No. 1 to Pentode Grid No. 1 (Max.)	0.01 Pf
RATINGS (Design Center Rating System)	
Pentode Section	
Plate Supply Voltage (Max.)	550 Volts
Plate Voltage (Max.)	300 Volts
Grid No. 2 Supply Voltage (Max.)	550 Volts
Grid No. 2 Voltage (Max.)	300 Volts
Cathode Current (Max.)	40 Ma
Plate Dissipation (Max.)	4 Watts
Grid No. 2 Dissipation (Max.)	1.7 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	1 Megohm
Cathode Bias (Max.)	2 Megohms
Triode Section	
Plate Supply Voltage (Max.)	550 Volts
Plate Voltage (Max.)	300 Volts
Cathode Current (Max.)	12 Ma
Plate Dissipation (Max.)	1 Watt
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	1 Megohm
Cathode Bias (Max.)	3 Megohms

CHARACTERISTICS AND TYPICAL OPERATION

Pentode Section			
Plate Voltage	170	200	220 Volts
Grid No. 2 Voltage	170	200	220 Volts
Grid No. 1 Voltage	−2.1	−2.9	−3.4 Volts
Plate Current	18	18	18 Ma
Grid No. 2 Current	3	3	3 Ma
Transconductance	11,000	10,400	10,000 μmhos
Plate Resistance	100,000	130,000	150,000 Ohms
Amplification Factor (Grid No. 1 to Grid No. 2)	36	36	36
Triode Section			
Plate Voltage			200 Volts
Grid No. 1 Voltage			−1.7 Volts
Plate Current			3 Ma
Transconductance			4000 μmhos
Amplification Factor			65

6DZ4/6AF4A

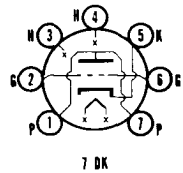
2DZ4/2AF4B
3DZ4/3AF4B

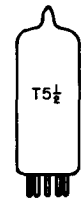
Color Television Type

UHF OSCILLATOR

Medium Mu Triode

Construction	Miniature T-5½
Base	Button 7 Pin, E7-1
Basing	7DK
Outline	5-1
Maximum Diameter	0.750 In.
Maximum Seated Height	1.500 In.
Maximum Overall Height	1.750 In.





ELECTRICAL DATA

HEATER OPERATION

	2DZ4/2AF4B	3DZ4/3AF4B	6DZ4/6AF4A
Heater Voltage	2.35	3.2	6.3 Volts
Heater Current	600	450	225 Ma
Heater Warm-up Time	11	11	— Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
Total DC and Peak	180	180	50 Volts
Heater Positive with Respect to Cathode			
DC	100	100	25 Volts
Total DC and Peak	180	180	50 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)

Grid to Plate	1.8 Pf
Input: g to (h + k + ES)	2.2 Pf
Output: p to (h + k + ES)	1.3 Pf
RATINGS (Design Maximum Rating System)	
UHF Oscillator Service	
Plate Voltage (Max.)	135 Volts
Plate Dissipation (Max.)	2.3 Watts
Negative Grid Voltage (Max.)	50 Volts
Grid Current (Max.)	2 Ma
Cathode Current (Max.)	20 Ma
CHARACTERISTICS AND TYPICAL OPERATION	
Class A1 Amplifier	
Plate Supply Voltage	80 Volts
Plate Resistor	2700 Ohms
Plate Current	15 Ma
Transconductance	6700 μmhos
Amplification Factor	14
Plate Resistance (Approx.)	2000 Ohms
Ec for Ib = 20 μa (Approx.)	–11 Volts
Oscillator at 1000 MHz(1)	
Plate Supply Voltage	135 Volts
Plate Resistor	2700 Ohms
Grid Resistor	10,000 Ohms
Plate Current	15.5 Ma
Grid Current (Approx.)	800 μa

NOTE:

(1) Measured in JEDEC Standard Oscillator No. 400.

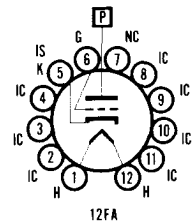
Color Television Type

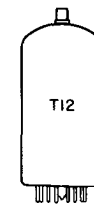
SHUNT REGULATOR

6EA4

Beam Triode

Construction	Compactron T-12
Base	Button 12 Pin, E12-74
Top Cap	C1-34
Basing	12FA
Outline	12-90
Maximum Diameter	1.563 In.
Maximum Seated Height	4.000 In.
Maximum Overall Height	4.375 In.





ELECTRICAL DATA

HEATER OPERATION	
Heater Voltage	6.3 Volts
Heater Current	200 Ma
Maximum Heater-Cathode Voltage	
Heater Positive with Respect to Cathode	Not Recommended
Heater Negative with Respect to Cathode	200 Volts
DIRECT INTERELECTRODE CAPACITANCES (Unshielded)	
Grid to Plate	0.036 Pf
Input: g to (h + k)	1.9 Pf
Output: p to (h + k)	0.63 Pf
RATINGS (Design Maximum Rating System)	
Plate-Supply Voltage, Unregulated (Max.)	60,000 Volts
Plate Voltage (Max.)	27,000 Volts
Negative DC Grid Voltage (Max.)	135 Volts
Peak Negative Grid Voltage (Max.)(1)	440 Volts
Plate Dissipation (Max.)	30 Watts
DC Plate Current (Max.)	1.6 Ma
Grid Circuit Resistance (Max.)(2)	3.0 Megohms
CHARACTERISTICS AND TYPICAL OPERATION	
Shunt Voltage Regulator Service	
Unregulated DC Supply Voltage	36,000 Volts
Equivalent Resistance of Unregulated Supply	11 Megohms
DC Reference Voltage	200 Volts
Equivalent Resistance of Reference Supply	1000 Ohms
Effective Grid-Plate Transconductance	200 μmhos
DC Plate Current for Zero Load Current	1000 μa