

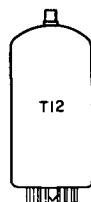
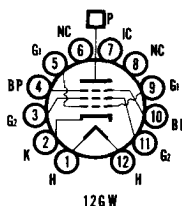
6KD6

30KD6, 36KD6, 40KD6

Color Television Type

**HORIZONTAL DEFLECTION
AMPLIFIER****Beam Power Pentode**

Construction.....Compactron T-12
 Base Button 12 Pin, E12-74
 Top Cap C1-2
 Basing⁽¹⁾ 12GW
 Outline 12-118
 Maximum Diameter 1.563 In.
 Maximum Seated Height 4.250 In.
 Maximum Overall Height 4.625 In.

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

	40KD6	36KD6	30KD6	6KD6
Heater Voltage.....	40	36	30	6.3 Volts
Heater Current	450	450	600	2850 Ma
Heater Warm-up Time	11	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)

Grid to Plate	0.8 Pf
Input: g1 to (h + k + g2 + bp).....	40 Pf
Output: p to (h + k + g2 + bp).....	16 Pf

RATINGS (Design Maximum Rating System)**Horizontal Deflection Amplifier⁽²⁾**

DC Plate Supply Voltage (Boost + DC Power Supply) (Max.)	990 Volts
Peak Positive Plate Voltage (Max.)	7000 Volts
Peak Negative Plate Voltage (Max.)	1100 Volts
Beam Plate Voltage (Max.)	20 Volts
Grid No. 2 Voltage (Max.)	200 Volts
Peak Negative Grid No. 1 Voltage (Max.)	250 Volts
Plate Dissipation (Max.) ⁽³⁾	33 Watts
Grid No. 2 Dissipation (Max.)	5.0 Watts
Average Cathode Current (Max.)	400 Ma
Peak Cathode Current (Max.)	1400 Ma
Grid No. 1 Circuit Resistance (Max.) ⁽³⁾	2.2 Megohm
Bulb Temperature (At Hottest Point) (Max.)	225 °C

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	150 Volts
Grid No. 2 Voltage	110 Volts
Grid No. 1 Voltage	-22.5 Volts
Beam Plate Voltage	Tied to Cathode
Plate Current	100 Ma
Grid No. 2 Current	2.0 Ma
Transconductance	14,000 μ mhos
Amplification Factor ⁽⁴⁾	4.0
Plate Resistance.....	6000 Ohms
Ec1 for Ib = 1 Ma (Approx.).....	-40 Volts

INSTANTANEOUS PLATE KNEE VALUES

Eb = 60 V, Ec2 = 100 V and Ec1 = 0 V;
 Ib = 750 Ma; and Ic2 = 42 Ma

NOTES:

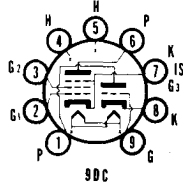
- (1) Pins designated Internal Connection (IC) may or may not be connected to an internal element, depending on manufacturer. To maintain interchangeability, these pins should not be used as tie points.
- (2) For operation in a 525 line, 30 frame system as described in "Standards of Good Engineering Practice for Television Broadcast Stations; Federal Communications Commission," the duty cycle of the voltage pulse must not exceed 15% of one horizontal scanning cycle.
- (3) In stages operating with grid leak bias, an adequate bias resistor or other suitable means is required to protect the tube in the absence of excitation.
- (4) Amplification factor with tube operating as a triode with 150 volts on the plate and Grid No. 2 and -22.5 volts on Grid No. 1.

Color Television Type
VHF OSCILLATOR and MIXER

6KE8
5KE8, 4KE8

**Medium Mu Triode and
Sharp Cutoff Pentode**

Construction Miniature T-6½
Base Button 9 Pin, E9-1
Basing 9DC
Outline 6-2
Maximum Diameter 0.875 In.
Maximum Seated Height 1.937 In.
Maximum Overall Height 2.187 In.



**ELECTRICAL DATA
HEATER OPERATION**

	4KE8	5KE8	6KE8
Heater Voltage.....	4.5	5.6	6.3 Volts
Heater Current.....	600	450	400 Ma
Heater Warm-up Time	11	11	— Seconds
Maximum Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			200 Volts
Total DC and Peak.....			100 Volts
Heater Positive with Respect to Cathode			200 Volts
DC			
Total DC and Peak.....			

DIRECT INTERELECTRODE CAPACITANCES (Shielded)

Triode Section

Grid to Plate	1.3 Pf
Input: g1 to (k + Pk + Pg3 + IS + h)	2.4 Pf
Output: p to (Tk + Pk + Pg3 + IS + h)	2.0 Pf

Pentode Section

Grid No. 1 to Plate (Max.).....	0.015 Pt
Input: g1 to (k + g3 + IS + g2 + h).....	5.0 Pf
Output: p to (k + g3 + IS + g2 + h).....	3.4 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	280	280 Volts
Grid No. 2 Supply Voltage (Max.)	—	280 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Cathode Current (Max.).....	20	20 Ma
Plate Dissipation (Max.)	2.0	2.0 Watts
Grid No. 2 Dissipation (Max.)	—	0.5 Watt
Positive Grid No. 1 Voltage (Max.)	0	0 Volt

**AVERAGE PLATE CHARACTERISTICS
(Pentode Section)**

