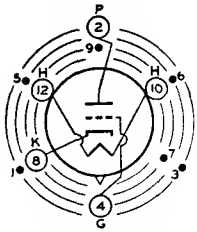


INDEX = LARGE LUG
● = PIN CUT OFF
12AQ

6CW4

HIGH-MU TRIODE

2CW4, 13CW4

Nuvistor type used as a grounded-cathode, neutralized rf amplifier in vhf tuners of color and black-and-white television and FM receivers. **Outlines section, 1**; requires nuvistor socket. Types 2CW4 and 13CW4 are identical with type 6CW4 except for heater ratings.

	2CW4	6CW4	13CW4	
Heater Voltage (ac/dc)	2.1	6.3	13.5	volts
Heater Current	0.45	0.135	0.06	ampere
Heater Warm-up Time (Average)	8	—	—	seconds
Peak Heater-Cathode Voltage	±100 max	±100 max	±100 max	volts

Direct Interelectrode Capacitances (Approx.)		
Grid to Plate	0.92	pF
Grid to Cathode, Heater, and Shell	4.3	pF
Plate to Cathode, Heater, and Shell	1.8	pF
Plate to Cathode	0.18	pF
Heater to Cathode	1.6	pF

Class A_1 Amplifier

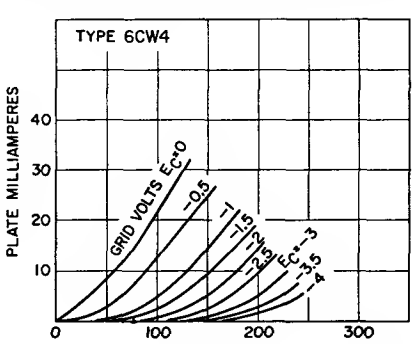
MAXIMUM RATINGS (Design-Maximum Values)

Plate Supply Voltage	300°	volts
Plate Voltage	135	volts
Grid Voltage:		
Negative-bias value	55	volts
Peak positive value	0	volts
Cathode Current	15	mA
Plate Dissipation	1.5	watt

CHARACTERISTICS AND TYPICAL OPERATION	**Characteristics**	**Typical Operation**	
Plate Supply Voltage	110	70	volts
Grid Supply Voltage	0	0	volts
Cathode-Bias Resistor	130	—	ohms
Grid Resistor	—	47000	ohms
Amplification Factor	65	68	
Plate Resistance (Approx.)	6600	5440	ohms
Transconductance	9800	12500	μmhos
Plate Current	7	7.2	mA
Grid Voltage (Approx.) for plate current of 10 μA	—4	—	volts

MAXIMUM CIRCUIT VALUES

Grid-Circuit Resistance:▪		
For fixed-bias operation	0.5	megohm
For cathode-bias operation	2.2	megohms

° A plate supply voltage of 300 volts may be used provided a sufficiently large resistor is used in the plate circuit to limit the plate dissipation to 1.5 watts under any condition of operation.

▪ For operation at metal-shell temperatures up to 135° C.