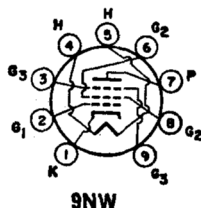


## POWER PENTODE

**6HB6**

Related type:  
15HB6

Miniature type used as vertical deflection-amplifier tube in television receivers. Outline 6G, Outlines section. Tube requires miniature nine-contact socket and may be mounted in any position. Type 15HB6 is identical



with type 6HB6 except for the heater ratings, as shown below.

	6HB6	15HB6	
Heater Voltage (ac/dc) .....	6.3	14.7	volts
Heater Current .....	0.76	0.3	ampere
Heater Warm-up Time (Average) .....	—	11	seconds
Peak Heater-Cathode Voltage:			
Heater negative with respect to cathode .....	200 max	200 max	volts
Heater positive with respect to cathode .....	200*max	200*max	volts

\* The dc component must not exceed 100 volts.

**CHARACTERISTICS:**

Plate Supply Voltage .....	60	250	250	volts
Grid No.3 .....			Connected to cathode at socket	
Grid-No.2 Supply Voltage .....	250	125	250	volts
Grid-No.1 Voltage .....	0	—	—	volts
Cathode-Bias Resistor .....	—	33	100	ohms
Mu-Factor, Grid No.2 to Grid No.1 .....	—	—	33	
Plate Resistance (Approx.) .....	—	28000	24000	ohms
Transconductance .....	—	24000	20000	$\mu$ mhos
Plate Current .....	150*	40	40	mA
Grid-No.2 Current .....	37*	4.2	6.2	mA
Grid-No.1 Voltage (Approx.) for plate current of 100 $\mu$ A .....	—	-6.4	-13	volts

\* This value can be measured by a method involving a recurrent waveform such that the maximum tube ratings will not be exceeded.

**Vertical-Deflection Amplifier**

For operation in a 525-line, 30-frame system

**MAXIMUM RATINGS (Design-Maximum Values):**

DC Plate Voltage .....	350 max	volts
Peak Positive-Pulse Plate Voltage* .....	2500 max	volts
DC Grid-No.2 (Screen-Grid) Voltage .....	300 max	volts
DC Grid-No.1 (Control-Grid) Voltage .....	-100 max	volts
Grid-No.2 Input .....	2 max	watts
Plate Dissipation .....	10 max	watts

**MAXIMUM CIRCUIT VALUES:**

Grid-No.1-Circuit Resistance:

For fixed-bias operation .....	1 max	megohm
For cathode-bias operation .....	2.2 max	megohms

\* The duration of the voltage pulse must not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical-scanning cycle is 2.5 milliseconds.