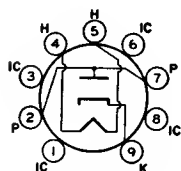


Refer to chart at end of section.

6BH3**9HP**

Socket terminals 1, 3, 6, and 8 should not be used as tie points. These tubes, like other power-handling tubes, should be adequately ventilated. Types 17BH3A and 22BH3A are identical with type 6BH3A except for heater ratings.

HALF-WAVE VACUUM RECTIFIER

6BH3A

17BH3A, 22BH3A

Novar types used as damper tubes in horizontal-deflection circuits of black-and-white television receivers.

Outlines section, 30B; requires novar 9-contact socket.

	6BH3A	17BH3A	22BH3A	
Heater Voltage (ac/dc)	6.3	17	22.4	volts
Heater Current	1.6	0.6	0.45	amperes
Heater Warm-up Time (Average)	—	11	11	seconds
Direct Interelectrode Capacitances (Approx.):				
Plate to Cathode and Heater			6.5	pF
Cathode to Plate and Heater			9	pF
Heater to Cathode			2.8	pF

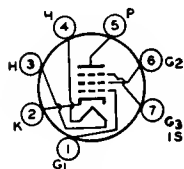
Damper Service

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

MAXIMUM RATINGS (Design-Maximum Values)

Peak Inverse Plate Voltage*	5500	volts
Peak Plate Current	1100	mA
Average Plate Current	130	mA
Plate Dissipation	6.5	watts
Heater-Cathode Voltage:		
Peak value	+300	volts
Average value	+100	volts

* Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).

**7CM****SHARP-CUTOFF PENTODE****6BH6**

Miniature type used as rf amplifier particularly in ac/dc receivers and in mobile equipment where low heater-current drain is important. It is particularly useful in high-frequency, wide-band applications. Outlines section, 5C; requires miniature 7-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.15	ampere
Peak Heater-Cathode Voltage	±90 max	volts
Direct Interelectrode Capacitances:*		
Grid No.1 to Plate	0.0035 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	5.4	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	4.4	pF

* Without external shield, or with external shield connected to cathode.

Class A₁ Amplifier**MAXIMUM RATINGS (Design-Center Values)**

Plate Voltage	300	volts
Grid-No.2 (Screen-Grid) Voltage	See curve page 98	
Grid-No.2 Supply Voltage	300	volts
Grid-No.1 (Control-Grid) Voltage:		
Negative-bias value	50	volts
Positive-bias value	0	volts

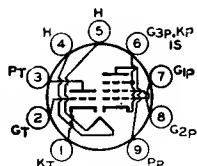
Plate Dissipation	3	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 150 volts	0.5	watt
For grid-No.2 voltages between 150 and 300 volts	See curve	page 98

CHARACTERISTICS

Plate Voltage	100	250	volts
Grid No.3	Connected to cathode at socket		
Grid-No.2 Voltage	100	150	volts
Grid-No.1 Voltage	-1	-1	volt
Plate Resistance (Approx.)	0.7	1.4	megohms
Transconductance	3400	4600	μ mhos
Plate Current	3.6	7.4	mA
Grid-No.2 Current	1.4	2.9	mA
Grid-No.1 Voltage (Approx.) for plate current of 10 μ A	-5	-7.7	volts

6BH8**8BH8****MEDIUM-MU TRIODE—
SHARP-CUTOFF PENTODE**

Miniature type used in color and black-and-white television receiver applications. The pentode unit is used as an if amplifier, video amplifier, or agc amplifier. The triode unit is used in low-frequency oscillator circuits. Outlines section, 6E; requires miniature 9-contact socket. Type 8BH8 is identical with type 6BH8 except for heater ratings.

**9DX**

Heater Voltage (ac/dc)	6BH8 6.3	8BH8 8.4	volts
Heater Current	0.6	0.45	ampere
Heater Warm-up Time (Average)	11	—	seconds
Heater-Cathode Voltage:			
Peak value	± 200 max	± 200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances (Approx.):			
Triode Unit:			
Grid to Plate		2.4	pF
Grid to Cathode and Heater		2.6	pF
Plate to Cathode and Heater		0.38	pF
Pentode Unit:			
Grid No.1 to Plate		0.046	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		7	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		2.4	pF
Triode Grid to Pentode Plate		0.016	pF
Pentode Grid No.1 to Triode Plate		0.004	pF
Pentode Plate to Triode Plate		0.095	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Center Values)	Triode Unit	Pentode Unit	
Plate Voltage	300	300	volts
Grid-No.2 (Screen-Grid) Supply Voltage	—	300	volts
Grid-No.2 Voltage	—	See curve	page 98
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0	0	volts
Plate Dissipation	2.5	3	watts
Grid-No.2 Input:			
For grid-No.2 voltages up to 150 volts	—	1	watt
For grid-No.2 voltages between 150 and 300 volts	—	See curve	page 98

CHARACTERISTICS

Plate Supply Voltage	150	200	volts
Grid-No.2 Supply Voltage	—	125	volts
Grid-No.1 Voltage	-5	—	volts
Cathode-Bias Resistor	—	82	ohms
Amplification Factor	17	—	
Plate Resistance (Approx.)	5150	150000	ohms
Transconductance	3300	7000	μ mhos
Plate Current	9.5	15	mA
Grid-No.2 Current	—	3.4	mA
Grid-No.1 Voltage (Approx.) for plate current of 100 μ A	-14	-8	volts

MAXIMUM CIRCUIT VALUES

Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.5	0.25	megohm
For cathode-bias operation	1	1	megohm