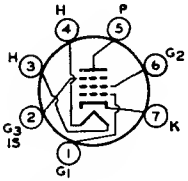
6HR6
19HR6

SEMIREMOTE-CUTOFF PENTODE



7BK

Miniature type used as if-amplifier tube in FM receivers. Outlines section, 5C; requires miniature 7-contact socket. Type 19HR6 is identical with type 6HR6 except for heater ratings.

	6HR6	19HR6	
Heater Voltage (ac/dc)	6.3	18.9	volts
Heater Current	0.45	0.15	ampere
Heater Warm-up Time (Average)	11	17	seconds
Heater-Cathode Voltage:			
Peak value	±200 max	±200 max	volts
Average value	100 max	100 max	volts
Direct Interelectrode Capacitances:			
Grid No.1 to Plate		0.006 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		8.8	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield		5.2	pF

Class A_1 Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

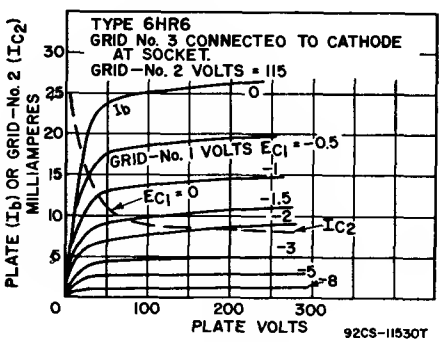
Plate Supply Voltage	300	volts
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0	volts
Grid-No.2 (Screen-Grid) Supply Voltage	300	volts
Grid-No.2 Voltage	See curve page 98	
Grid-No.1 (Control-Grid) Voltage:		
Negative-bias value	50	volts
Positive-bias value	0	volts
Plate Dissipation	3	watts
Grid-No.2 Input:		
For grid-No.2 voltages up to 150 volts	1	watt
For grid-No.2 voltages between 150 and 300 volts	See curve page 98	

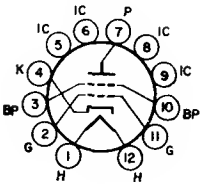
CHARACTERISTICS

Plate Supply Voltage	200	volts
Grid No.3	Connected to cathode at socket	
Grid-No.2 Supply Voltage	115	volts
Grid-No.1 Supply Voltage	0	volts
Cathode-Bias Resistor	68	ohms
Plate Resistance (Approx.)	0.5	megohm
Transconductance	8500	μmhos
Plate Current	13.2	mA
Grid-No.2 Current	4.3	mA
Grid-No.1 Voltage (Approx.) for transconductance of 60 μmhos	—15	volts

MAXIMUM CIRCUIT VALUES

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





12GY

BEAM TRIODE 6HS5

Duodecar type used as a pulse-type regulator in the high-voltage power supply of color television receivers. **Outlines section,** 15E; requires duodecar 12-contact socket. Heater: volts (ac/dc), 6.3; amperes, 1.5.

Class A_1 Amplifier

CHARACTERISTICS

Pulse Plate Voltage*	3500	volts
Grid No.2 (Beam Plate)	Connected to cathode at socket	
Grid-Voltage, Negative-bias value	4.4	volts
Peak Plate Current	300	mA
Amplification Factor	300	
Transconductance	65000	μmhos
Plate Resistance (Approx.)	4600	ohms
Grid Voltage (Approx.) for plate current of 1 mA	−13	volts

* Duty cycle of the pulse must be less than 2.5%.

High-Voltage Regulator Service

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

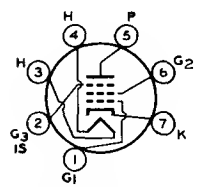
MAXIMUM RATINGS (Design-Maximum Values)

Peak Plate Voltage#		5500	volts
Plate Dissipation		30	watts
Peak Plate Current		325	mA
Heater-Cathode Voltage:			
Peak value	+200	−450	volts
Average value		100	volts
Bulb Temperature (At hottest point)		220	°C

MAXIMUM CIRCUIT VALUE

Grid-Circuit Resistance▲	0.1 megohm

Pulse duration must not exceed 15% of a horizontal scanning cycle (10 microseconds).
▲ Larger values of grid-circuit resistance may be used if provisions are made to protect the tube.



7BK

SHARP-CUTOFF PENTODE 6HS6

Miniature type used as if-amplifier and limiter tube in FM receivers. **Outlines section,** 5C; requires miniature 7-contact socket.

Heater Voltage (ac/dc)	6.3	volts
Heater Current	0.45	ampere
Heater Warm-up Time (Average)	11	seconds
Heater-Cathode Voltage:		
Peak value	±200 max	volts
Average value	100 max	volts
Direct Interelectrode Capacitances:		
Grid No.1 to Plate	0.006 max	volts
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	8.8	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield	5.2	pF

Class A_1 Amplifier

MAXIMUM RATINGS (Design-Maximum Values)

Plate Supply Voltage	300	volts
Grid-No.3 (Suppressor-Grid) Voltage, Positive Value	0	volts
Grid-No.2 (Screen-Grid) Supply Voltage	300	volts
Grid-No.2 Voltage	See curve page 98	