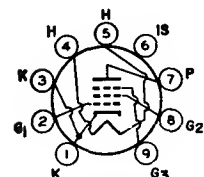


Refer to chart at end of section.

6EH7

SEMIREMOTE-CUTOFF
PENTODE6EH7/
EF183

3EH7/XF183, 4EH7



9AQ

Miniature types used as if-amplifier tubes in color and black-and-white television receivers. Outlines section, 6C; requires miniature 9-contact socket. Types 3EH7/XF183 and 4EH7 are identical with type 6EH7/EF183 except for heater ratings.

	3EH7/XF183	4EH7	6EH7/EF183	
Heater Voltage (ac/dc)	3.4	4.4	6.3	volts
Heater Current	0.6	0.45	0.3	ampere
Peak Heater-Cathode Voltage	±150 max	±150 max	±150 max	volts
Direct Inter-electrode Capacitances:				
Grid No.1 to Plate			0.005 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			9	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			3	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Center Values)

Plate Supply Voltage	550	volts
Plate Voltage	250	volts
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0	volts
Grid-No.2 (Screen-Grid) Supply Voltage	550	volts
Grid-No.2 Voltage	250	volts
Cathode Current	20	mA
Plate Dissipation	2.5	watts
Grid-No.2 Input	0.65	watt

CHARACTERISTICS

Plate Voltage	200	volts
Grid No.3	Connected to cathode at socket	
Grid-No.2 Voltage	90	volts
Grid-No.1 Voltage	-2	volts
Plate Resistance (Approx.)	0.5	megohm
Transconductance	12500	μmhos
Plate Current	12	mA
Grid-No.2 Current	4.5	mA

TYPICAL OPERATION

Plate Voltage	200	200	200	200	volts
Grid No.3	Connected to cathode at socket				
Grid-No.2 Supply Voltage	200	200	200	200	volts
Grid-No.2 Series Resistor	22000	22000	22000	22000	ohms
Grid-No.1 Voltage	-19.5	-9.5	-6.5	-2	volts
Transconductance	125	625	1250	12500	μmhos
RMS Grid-No.1 Voltage, for cross-modulation factor of 0.01	450	160	100	—	mV

MAXIMUM CIRCUIT VALUE

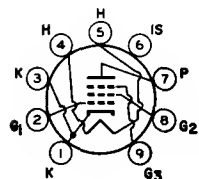
Grid-No.1-Circuit Resistance	1	megohm
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Refer to chart at end of section.

6EH8

Refer to chart at end of section.

6EJ7



9AQ

SHARP-CUTOFF PENTODE

6EJ7/
EF184

3EJ7/XF184, 4EJ7

Miniature types used as if-amplifier tubes in color and black-and-white television receivers. Outlines section, 6C; requires miniature 9-contact socket. Types 3EJ7/XF184 and 4EJ7 are identical with type 6EJ7/EF184 except for heater ratings.

	3EJ7/XF184	4EJ7	6EJ7/EF184	
Heater Voltage (ac/dc)	3.4	4.4	6.3	volts
Heater Current	0.6	0.45	0.3	ampere
Peak Heater-Cathode Voltage	±150 max	±150 max	±150 max	volts
Direct Interelectrode Capacitances:				
Grid No.1 to Plate			0.005 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			10	pF
Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal Shield			3	pF

Class A₁ Amplifier

MAXIMUM RATINGS (Design-Center Values)

Plate Supply Voltage	550	volts
Plate Voltage	250	volts
Grid-No.2 (Screen-Grid) Supply Voltage	550	volts
Grid-No.2 Voltage	250	volts
Cathode Current	25	mA
Plate Dissipation	2.5	watts
Grid-No.2 Input	0.9	watt

CHARACTERISTICS

Plate Voltage	190	200	volts
Grid No.3	Connected to cathode at socket		
Grid-No.2 Voltage	190	200	volts
Grid-No.1 Voltage	-2.35	-2.5	volts
Plate Resistance (Approx.)	0.35	0.35	megohm
Transconductance	15000	15000	μmbos
Plate Current	10	10	mA
Grid-No.2 Current	4.1	4.1	mA

MAXIMUM CIRCUIT VALUE

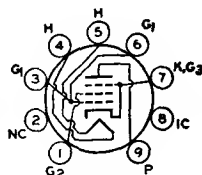
Grid-No.1-Circuit Resistance	1	megohm
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6EM5

8EM5

BEAM POWER TUBE

Miniature type used as vertical-deflection amplifier in television receivers utilizing picture tubes having diagonal deflection angles of 110 degrees. Outlines section, 6G; requires miniature 9-contact socket. Type 8EM5 is identical with type 6EM5 except for heater ratings.



9HN

	6EM5	8EM5	
Heater Voltage (ac/dc)	6.3	8.4	volts
Heater Current	0.8	0.6	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:			
Grid No.1 to Plate		0.7 max	pF
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3		10	pF
Plate to Cathode, Heater, Grid No.2, and Grid No.3		5.1	pF

Class A₁ Amplifier

CHARACTERISTICS

Plate Voltage	60	250	volts
Grid-No.2 Voltage	250	250	volts
Grid-No.1 Voltage	0	-18	volts
Mu Factor, Grid No.1 to Grid No.2	—	8.7	
Plate Resistance	—	0.05	megohm
Transconductance	—	5100	μmbos
Plate Current	180*	40	mA
Grid-No.2 Current	30*	3	mA
Grid-No.1 Voltage (Approx.) for plate current of 0.2 mA	—	-37	volts

* These values can be measured by a method involving a recurrent waveform such that the maximum ratings of the tube will not be exceeded.