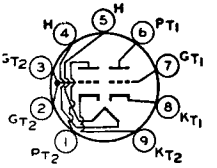
CHARACTERISTICS

Plate Supply Voltage	125	volts
Grid No.3	Connected to cathode at socket	
Grid-No.2 Supply Voltage	125	volts
Cathode-Bias Resistor	56	ohms
Plate Resistance (Approx.)	0.2	megohm
Transconductance	14000	μmhos
Plate Current	11	mA
Grid-No.2 Current	3.2	mA
Grid-No.1 Voltage (Approx.) for plate current of 20 μA	−3.5	volts

6EW7

10EW7, 15EW7

DUAL TRIODE



9HF

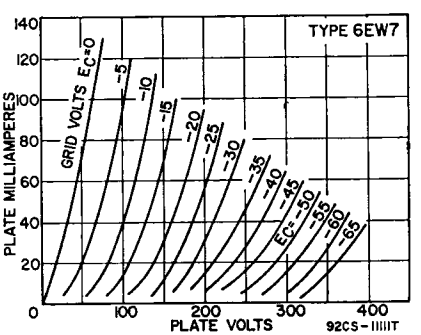
Miniature type used as combined vertical-deflection oscillator and vertical-deflector amplifier in television receivers. **Outlines section,** 6E, requires miniature 9-contact socket. For curve of average plate characteristics, Unit No.1, refer to type 6DE7 (Unit No.1). Types 10EW7 and 15EW7 are identical with type 6EW7 except for heater ratings.

	6EW7	10EW7	15EW7	
Heater Voltage (ac/dc)	6.3	9.7	14.8	volts
Heater Current	0.9	0.6	0.45	ampere
Heater Warm-up Time	—	11	11	seconds
Heater-Cathode Voltage:				
Peak value	±200 max	±200 max	±200 max	volts
Average value	100 max	100 max	100 max	volts

Direct Interelectrode Capacitances (Approx.):	Unit No.1	Unit No.2	
Grid to Plate	4.2	9	pF
Grid to Cathode and Heater	2.2	7	pF
Plate to Cathode and Heater	0.4	1.2	pF

Class A_1 Amplifier

CHARACTERISTICS	Unit No.1	Unit No.2	
Plate Voltage	250	150	volts
Grid Voltage	−11	−17.5	volts
Amplification Factor	17.5	6	
Plate Resistance (Approx.)	8750	800	ohms
Transconductance	2000	7500	μmhos
Plate Current	5.5	45	mA
Plate Current for plate voltage of 60 volts and zero grid voltage	—	95	mA
Plate Current for grid voltage of −25 volts	—	8	mA
Grid Voltage (Approx.) for plate current of 10 μA	−20	—	volts
Grid Voltage (Approx.) for plate current of 100 μA	—	−40	volts



Vertical-Deflection Oscillator and Amplifier

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

MAXIMUM RATINGS (Design-Maximum Values)	Unit No.1 Oscillator	Unit No.2 Amplifier	
DC Plate Voltage	330	330	volts
Peak Positive-Pulse Plate Voltage#	—	1500	volts
Peak Negative-Pulse Grid Voltage	400	250	volts
Peak Cathode Current	77	175	mA
Average Cathode Current	22	50	mA
Plate Dissipation	1.5	10	watts
MAXIMUM CIRCUIT VALUES			
Grid-Circuit Resistance:			
For cathode-bias operation	2.2	2.2	megohms
For grid-resistor-bias operation	2.2	2.2	megohms

Pulse duration must not exceed 15% of a vertical scanning cycle (2.5 milliseconds).

Refer to chart at end of section. **6EX6**

Refer to chart at end of section. **6EY6**

Refer to chart at end of section. **6EZ5**

Refer to chart at end of section. **6EZ8**

Refer to chart at end of section. **6F4**

Refer to chart at end of section. **6F5**

Refer to chart at end of section. **6F5GT**

Refer to chart at end of section. **6F6 6F6G 6F6GT**

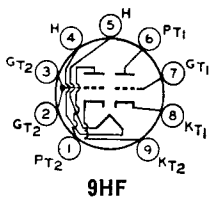
Refer to chart at end of section. **6F7**

Refer to chart at end of section. **6F8G**

Refer to chart at end of section. **6FA7**

6FD7

13FD7



9HF

DUAL TRIODE

Miniature type containing high-mu and low-mu triode units used as combined vertical-deflection oscillator and vertical-deflection amplifier in television receivers. **Outlines section,** 6E; requires miniature 9-contact socket. Type 13FD7 is identical with type 6FD7 except for heater ratings.

	6FD7	13FD7	
Heater Voltage (ac/dc)	6.3	13	volts
Heater Current	0.925	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.):	Unit No.1	Unit No.2	
Grid to Plate	4.5	10	pF
Grid to Cathode and Heater	2.2	6.5	pF
Plate to Cathode and Heater	0.4	0.2	pF