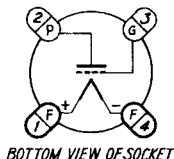


TRIODE
DETECTOR OR AMPLIFIER
Filament Type Glass Bulb

The 30 is a triode type amplifier tube designed for service as a detector or amplifier in battery operated receivers. The ratings and electrical characteristics are identical with those of the type 1H4G.



RATINGS

Heater Voltage	2.0 d-c volts
Heater Current	0.060 amp
Maximum Plate Voltage	180 volts

DIRECT INTERELECTRODE CAPACITANCES

Grid to Plate	6.0	μf
Input	3.7	μf
Output	2.1	μf

AMPLIFIER - CLASS A

Plate Voltage	90	135	180	volts
Grid Bias	-4.5	-9	-13.5	volts
Amplification Factor	9.3	9.3	9.3	
Plate Resistance	11000	10300	10300	ohms
Transconductance	850	900	900	μmhos
Plate Current	2.5	3.0	3.1	ma

If a grid resistor is used, its value should not exceed 2 megohms.

AMPLIFIER - CLASS B - TWO TUBES

Maximum Plate Voltage	130	volts
Maximum Peak Plate Current (per tube)	50	ma
Maximum No-Signal Plate Current (per tube)	1.5	ma
Typical Operation:		
Plate Voltage	157.5	volts
Grid Bias	-15	volts
No-Signal Plate Current (per tube)	0.5	ma
Load Resistance (plate to plate)	3000	ohms
Power Output†	2.1	watts
(With average power input = 260 mw. grid to grid)		

DETECTOR - BIASED TYPE

Plate Voltage	90	135	180	volts
Grid Bias (approximate)	-9	-13.5	-18	volts
Plate Current†	Adjusted to 0.2 ma. with no signal			

DETECTOR - GRID LEAK TYPE

Plate Voltage	45 max. volts
Grid	Returned to positive filament
Grid Leak Resistance	1 to 5 megohms
Grid Condenser	0.00025 μf

†With one type 30 as driver operated at plate voltage of 157.5 volts, grid bias of -11.3 volts, plate load of approximately 18000 ohms, and input transformer ratio, primary to 1/2 secondary, of 1.166. Total distortion is 6% to 7%.

‡With normal maximum signal the average d-c plate current should not exceed 2 ma.

For additional curves refer to the type 1H4G.

