As Class A_1 Amplifier

PLATE VOLTAGE	250 *max.*	Volts
SCREEN VOLTAGE	100 *max.*	Volts
GRID VOLTAGE	−3 *min.*	Volts
TYPICAL OPERATION:		
Plate Voltage	250	Volts
Screen Voltage	100	Volts
Grid Voltage	−3	Volts
Suppressor	Connected to cathode at socket	
Plate Current	8.6	Milliamperes
Screen Current	2	Milliamperes
Plate Resistance	0.8	Megohm
Transconductance	2000	Micromhos
Transconductance (At −35 volts bias)	10	Micromhos

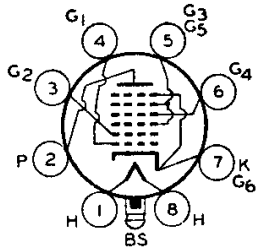
INSTALLATION and APPLICATION

The base of the 7A7-LM fits the lock-type socket which may be installed to hold the tube in any position. Physical characteristics of the 7A7-LM are shown in Fig. 1-4, OUTLINES SECTION. For heater operation and cathode connection, refer to Type 6A8. Application is similar to that for Type 6SK7.

7A8

OCTODE CONVERTER

The 7A8 is a multi-electrode tube of the heater-cathode type designed to perform simultaneously the functions of a mixer and of an oscillator tube in superheterodyne circuits.



8U

★ CHARACTERISTICS

HEATER VOLTAGE (A.C. or D.C.)	6.3¶	Volts
HEATER CURRENT	0.15¶¶	Ampere
DIRECT INTERELECTRODE CAPACITANCES:		
Grid No. 4 to Plate	0.15	μμf
Grid No. 4 to Grid No. 2	0.12	μμf
Grid No. 4 to Grid No. 1	0.12	μμf
Grid No. 1 to Grid No. 2	0.60	μμf
Grid No. 4 to All Other Electrodes (R-F Input)	7.5	μμf
Grid No. 2 to All Other Electrodes Except Grid No. 1 (Osc. Output)	3.4	μμf
Grid No. 1 to All Other Electrodes Except Grid No. 2 (Osc. Input)	3.8	μμf
Plate to All Other Electrodes (Mixer Output)	9	μμf

¶ Nominal value is 7 volts. ¶¶ Nominal value is 0.16 ampere.

As Frequency Converter

PLATE VOLTAGE	250 *max.*	Volts
SCREEN VOLTAGE (Grids No. 3 and No. 5)	100 *max.*	Volts
ANODE-GRID SUPPLY VOLTAGE (Grid No. 2)	250 *max.*	Volts
CONTROL-GRID VOLTAGE (Grid No. 4)	−3 *min.*	Volts
TYPICAL OPERATION:		
Plate Voltage	250	Volts
Screen Voltage	100	Volts
Anode-Grid Supply Voltage	250*	Volts
Control-Grid Voltage	−3	Volts
Oscillator-Grid Resistor (Grid No. 1)	50000	Ohms
Plate Current	3	Milliamperes
Screen Current	2.8	Milliamperes
Anode-Grid Current	4.5	Milliamperes

* Applied through 20000-ohm voltage-dropping resistor by-passed by 0.1 μf condenser