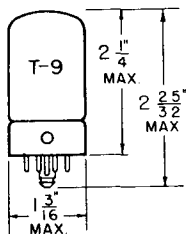


TUNG-SOL

TRIODE-HEPTODE



GLASS BULB

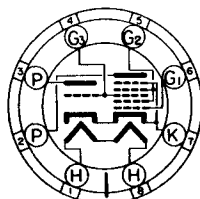
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 300 MA.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

LOCK-IN
8 PIN BASE

THE 7S7 IS A HEATER-CATHODE TYPE COMBINING A TRIODE AND A HEPTODE IN THE LOCK-IN-CONSTRUCTION. THE TWO SECTIONS ARE INTERCONNECTED INTERNALLY TO PROVIDE FOR EFFICIENT LOCAL OSCILLATOR-MIXER SERVICE WITH A MINIMUM OF FREQUENCY SHIFT WITH VARIATION OF CONTROL GRID BIAS.

DIRECT INTERELECTRODE CAPACITANCES

WITH EXTERNAL SHIELD CONNECTED TO CATHODE

HEPTODE GRID #1 TO PLATE: (G_1 TO P_H) MAX.	0.03	$\mu\mu f$
HEPTODE GRID #1 TO TRIODE PLATE: (G_1 TO P_t) MAX.	0.1	$\mu\mu f$
HEPTODE GRID #1 TO GRID #3: (G_1 TO G_3) MAX.	0.35	$\mu\mu f$
TRIODE GRID TO PLATE: (G_3 TO P_t)	1	$\mu\mu f$
SIGNAL INPUT: G_1 TO ($H+K+G_5+G_2+G_4+G_3$)	5	$\mu\mu f$
MIXER OUTPUT: P_H TO ($H+K+G_5+G_2+G_4+G_3$)	8	$\mu\mu f$
OSC. INPUT: G_3 TO ($H+K+G_5+G_2+G_4$)	7	$\mu\mu f$
OSC. OUTPUT: P_t TO ($H+K+G_5+G_2+G_4$)	3.5	$\mu\mu f$

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD M6-210

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE	90	VOLTS
MAXIMUM HEPTODE PLATE VOLTAGE	300	VOLTS
MAXIMUM HEPTODE GRIDS #2 & #4 VOLTAGE	100	VOLTS
MAXIMUM HEPTODE GRIDS #2 & #4 SUPPLY VOLTAGE	300	VOLTS
MINIMUM HEPTODE GRID #1 VOLTAGE	0	VOLTS
MAXIMUM TRIODE PLATE VOLTAGE	175	VOLTS
MAXIMUM TRIODE PLATE SUPPLY VOLTAGE	300	VOLTS
MAXIMUM HEPTODE PLATE DISSIPATION	0.6	WATT
MAXIMUM HEPTODE GRIDS #2 & #4 DISSIPATION	0.4	WATT
MAXIMUM TRIODE PLATE DISSIPATION	1	WATT
MAXIMUM CATHODE CURRENT	14	MA.

PLATE
2038
JULY 1,
1948

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CONVERTER SERVICE

HEATER VOLTAGE	6.3	6.3	VOLTS
HEATER CURRENT	300	300	MA.
HEPTODE PLATE VOLTAGE	100	250	VOLTS
HEPTODE GRIDS #2 & #4 VOLTAGE	100	100	VOLTS
TRIODE PLATE VOLTAGE	100	250 ^A	VOLTS
HEPTODE GRID #1 VOLTAGE	-2	-2	VOLTS
SELF BIAS RESISTOR	240	195	OHMS
GRID #3 RESISTOR	50 000	50 000	OHMS
HEPTODE PLATE CURRENT	1.9	1.8	MA.
HEPTODE GRIDS #2 & 4 CURRENT	3	3	MA.
TRIODE PLATE CURRENT	3	5	MA.
GRID #3 CURRENT	0.3	0.4	MA.
HEPTODE PLATE RESISTANCE	0.5	1.25	MEGOHMS
CONVERSION TRANSCONDUCTANCE	500	525	μMHOS
CONVERSION TRANSCONDUCTANCE WITH E _c = -21 VOLTS	2	2	μMHOS
TOTAL CATHODE CURRENT	8.2	10.2	MA.

^A APPLIED THROUGH 20,000 OHM DROPPING RESISTOR PROPERLY BY-PASSED.

TRIODE SECTION

HEATER VOLTAGE	6.3	VOLTS
HEATER CURRENT	300	MA.
PLATE VOLTAGE	100	VOLTS
GRID VOLTAGE	0	VOLTS
PLATE CURRENT	6.5	MA.
PLATE RESISTANCE	11 000	OHMS
TRANSCONDUCTANCE	1 650	μMHOS
AMPLIFICATION FACTOR	18	

SIMILAR TYPE REFERENCE: Ratings and Characteristics similar to type 7J7.

