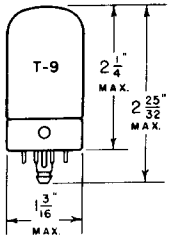
TUNG-SOL

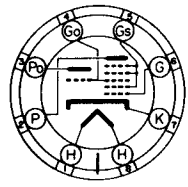
TRIODE HEXODE CONVERTER



UNIPOTENTIAL CATHODE

HEATER
6.3 VOLTS 0.3 AMPERE
AC OR DC

GLASS BULB



8AR
BOTTOM VIEW

LOCKING-IN 8 PIN BASE

THE TUNG-SOL 7J7 IS DESIGNED FOR SERVICE AS AN OSCILLATOR AND MIXER IN SUPERHETERODYNE CIRCUITS. IT CONSISTS OF A HEXODE MIXER AND A TRIODE OSCILLATOR WITH A COMMON CATHODE. THE INJECTOR GRID OF THE HEXODE IS INTERNALLY CONNECTED TO THE TRIODE GRID. ITS RATINGS AND ELECTRICAL CHARACTERISTICS ARE SIMILAR TO THOSE OF THE 6J8G

RATINGS

HEATER VOLTAGE — NOMINAL	7.0	VOLTS
HEATER CURRENT — NOMINAL	0.32	AMPERE
MAXIMUM HEXODE PLATE VOLTAGE (P)	300	VOLTS
MAXIMUM HEXODE SCREEN VOLTAGE (G_S)	100	VOLTS
MAXIMUM HEXODE SCREEN SUPPLY VOLTAGE	300	VOLTS
MAXIMUM TRIODE PLATE VOLTAGE (P_O)	150	VOLTS
MAXIMUM TRIODE PLATE SUPPLY VOLTAGE	300	VOLTS
MAXIMUM HEXODE PLATE DISSIPATION (P)	0.5	WATT
MAXIMUM HEXODE SCREEN DISSIPATION (G_S)	0.3	WATT
MAXIMUM TRIODE PLATE DISSIPATION (P_O)	1.25	WATTS
MAXIMUM TOTAL CATHODE CURRENT	14	MA.
MINIMUM EXTERNAL SIGNAL GRID BIAS VOLTAGE (G)	0	VOLT

DIRECT INTERELECTRODE CAPACITANCES[S]

HEXODE GRID (G) TO HEXODE PLATE (P)	$0.01^{MAX.}$ μμf
HEXODE GRID (G) TO TRIODE PLATE (P_O)	$0.1^{MAX.}$ μμf
HEXODE GRID (G) TO TRIODE GRID AND HEXODE GRID (G_O)	$0.2^{MAX.}$ μμf
TRIODE GRID (G_O) TO TRIODE PLATE (P_O)	1.0 μμf
SIGNAL INPUT: HEXODE GRID (G) TO ALL OTHER ELECTRODES	5.5 μμf
OSC. INPUT: TRIODE GRID AND HEXODE GRID (G_O) TO ALL OTHER ELECTRODES EXCEPT TRIODE PLATE (P_O)	8.5 μμf
OSC. OUTPUT: TRIODE PLATE (P_O) TO ALL OTHER ELECTRODES EXCEPT TRIODE GRID AND HEXODE GRID (G_O)	2.0 μμf
MIXER OUTPUT: HEXODE PLATE (P) TO ALL OTHER ELECTRODES	7.5 μμf

[S] WITH EXTERNAL SHIELD CONNECTED TO CATHODE

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TUNG-SOL

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CONVERTER SERVICE

HEXODE PLATE (P) VOLTAGE	100	250	VOLTS
HEXODE SCREEN (G_S) VOLTAGE	100	100	VOLTS
TRIODE PLATE (P_O) VOLTAGE	100	–	VOLTS
TRIODE PLATE (P_O) SUPPLY VOLTAGE	–	250[A]	VOLTS
HEXODE CONTROL GRID (G) VOLTAGE	−3	−3	VOLTS
HEXODE PLATE CURRENT	1.1	1.3	MA.
HEXODE SCREEN CURRENT	3.1	2.9	MA.
TRIODE PLATE CURRENT	3.7	5.4	MA.
TRIODE GRID (G_O) CURRENT	0.3	0.4	MA.
TOTAL CATHODE CURRENT	8.2	10.0	MA.
TRIODE GRID (G_O) RESISTOR	50000	50000	OHMS
HEXODE PLATE RESISTANCE	0.3	1.5	MEGOHMS
CONVERSION TRANSCONDUCTANCE	260	300	μMHOS
CONTROL GRID VOLTAGE	−20	−20	VOLTS
FOR CONVERSION TRANSCONDUCTANCE = 2 μMHOS			

[A] THIS VALUE OF TRIODE PLATE SUPPLY VOLTAGE APPLIED THROUGH A 20 000 OHM DROPPING RESISTOR.

STATIC CHARACTERISTICS OF TRIODE SECTION ONLY

PLATE VOLTAGE	150	VOLTS
GRID VOLTAGE	−3	VOLTS
PLATE CURRENT	7.5	MA.
PLATE RESISTANCE	10400	OHMS
TRANSCONDUCTANCE	1350	μMHOS
AMPLIFICATION FACTOR	14	

FOR "INTERPRETATION OF RATINGS" REFER TO FRONT OF BOOK.

PLATE
859-1