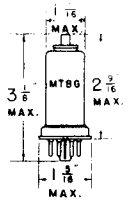
TUNG-SOL

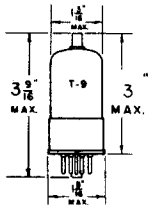


METAL TUBE
SMALL WAFER
8 PIN OCTAL BASE
6K8

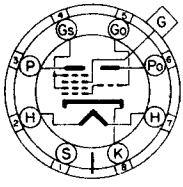
TRIODE HEXODE CONVERTER

UNIPOTENTIAL CATHODE

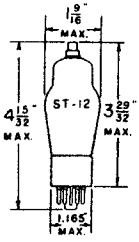
HEATER
6.3 VOLTS 0.3 AMPERE
AC OR DC



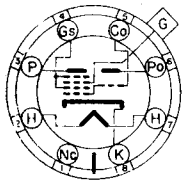
GLASS BULB
8 PIN OCTAL BASE
WITH METAL SHELL
6K8GT



8K
6K8, 6K8GT



GLASS BULB
SMALL 8 PIN OCTAL BASE
6K8G



G-8K
6K8G

THE TUNG-SOL 6K8, 6K8G AND 6K8GT CONSIST OF A TRIODE OSCILLATOR AND A HEXODE MIXER IN A COMMON ENVELOPE. THE PHYSICAL DESIGN OF THESE TUBES REDUCES INTERACTION BETWEEN THE OSCILLATOR AND MIXER SECTIONS AND MAKES FOR STABLE OPERATION IN SUPERHETERODYNE RECEIVERS ON THE HIGH FREQUENCIES AS WELL AS THE BROADCAST BAND.

RATINGS

MAXIMUM HEXODE PLATE (P) VOLTAGE	300	VOLTS
MAXIMUM HEXODE SCREEN (G_S) SUPPLY VOLTAGE	300	VOLTS
MAXIMUM HEXODE SCREEN (G_S) VOLTAGE	150	VOLTS
MAXIMUM HEXODE PLATE DISSIPATION	0.75	WATT
MAXIMUM HEXODE SCREEN DISSIPATION	0.7	WATT
MAXIMUM TOTAL CATHODE CURRENT	16	MA.
MINIMUM EXTERNAL SIGNAL GRID (G) BIAS VOLTAGE	0	VOLTS
MAXIMUM OSCILLATOR ANODE (P_O) VOLTAGE	125	VOLTS
MAXIMUM OSCILLATOR ANODE DISSIPATION	0.75	WATT

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

CONTINUED NEXT PAGE

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PLATE
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SEPT. 17
1941

TUNG-SOL

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CONVERTER SERVICE

HEXODE PLATE (P) VOLTAGE	100	250	VOLTS
HEXODE SCREEN (G_S) VOLTAGE	100	100	VOLTS
HEXODE CONTROL GRID (G) VOLTAGE	−3	−3	VOLTS
OSCILLATOR ANODE (P_O) VOLTAGE	100	100	VOLTS
HEXODE PLATE CURRENT	2.3	2.5	MA.
HEXODE SCREEN CURRENT	6.2	6.0	MA.
OSCILLATOR ANODE CURRENT	3.8	3.8	MA.
OSCILLATOR GRID (G_O) CURRENT	0.15	0.15	MA.
TOTAL CATHODE CURRENT	12.5	12.5	MA.
OSCILLATOR GRID RESISTOR	50 000	50 000	OHMS
CONVERSION TRANSCONDUCTANCE	325	350	μMHOS
HEXODE PLATE RESISTANCE APPROX.	0.4	0.6	MEGOHM
HEXODE CONTROL GRID VOLTAGE APPROX. FOR CONVERSION TRANSCONDUCTANCE = 2 μMHOS	−30	−30	VOLTS

DIRECT INTERELECTRODE CAPACITANCES[5]

	6K8	6K8G 6K8GT	
SIGNAL GRID TO MIXER PLATE (G TO P)	0.03 MAX.	0.08 MAX.	μμf
SIGNAL GRID TO OSCILLATOR PLATE (G TO P_O)	0.02 MAX.	0.05 MAX.	μμf
SIGNAL GRID TO OSCILLATOR GRID (G TO G_O)	0.2 MAX.	0.2 MAX.	μμf
OSCILLATOR GRID TO OSCILLATOR PLATE (G_O TO P_O)	1.1	1.8	μμf
SIGNAL INPUT: G_O TO ALL OTHER ELECTRODES	6.6	4.6	μμf
OSCILLATOR INPUT: G_O TO ALL OTHER ELECTRODES EXCEPT P_O	6.0	6.5	μμf
OSCILLATOR OUTPUT: P_O TO ALL OTHER ELECTRODES EXCEPT G_O	3.2	3.4	μμf
MIXER OUTPUT: P TO ALL OTHER ELECTRODES	3.5	4.8	μμf
OSCILLATOR GRID TO MIXER PLATE (G_O TO P)	0.1 MAX.	0.15 MAX.	μμf

[A] WITH EXTERNAL SHIELD OR SHELL CONNECTED TO CATHODE.

NOTE: THE TRANSCONDUCTANCE OF THE OSCILLATOR SECTION (NOT OSCILLATING) IS APPROXIMATELY 3000 UMHOS WHEN THE TRIODE PLATE VOLTAGE IS 100 VOLTS, AND THE TRIODE GRID VOLTAGE IS ZERO VOLTS.

PLATE 1109-1