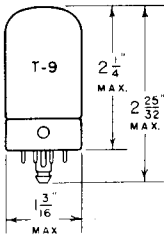


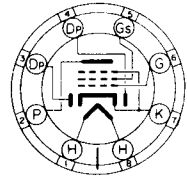
TUNG-SOL

DUO-DIODE PENTODE AMPLIFIER



UNI-POTENTIAL CATHODE

HEATER

12.6 VOLTS 0.15 AMPERE
AC OR DC

8AE-L-7

GLASS BULB

LOCKING-IN 8 PIN BASE

THE TUNG-SOL 14R7 COMBINES TWO DIODES AND A PENTODE IN A SINGLE BULB, USING A COMMON CATHODE. IT IS DESIGNED FOR SERVICE AS A DIODE DETECTOR, AVC RECTIFIER AND PENTODE AMPLIFIER IN AC-DC RECEIVERS USING 150 MA. HEATER TUBES.

RATINGS

NOMINAL HEATER VOLTAGE	14.0	VOLTS
NOMINAL HEATER CURRENT	0.16	AMPERE
MAXIMUM PLATE VOLTAGE	250	VOLTS
MAXIMUM SCREEN VOLTAGE	100	VOLTS
MAXIMUM SCREEN SUPPLY VOLTAGE	250	VOLTS
MINIMUM EXTERNAL GRID BIAS VOLTAGE	0	VOLT
MAXIMUM PLATE DISSIPATION	2.0	WATTS
MAXIMUM SCREEN DISSIPATION	0.25	WATT
MINIMUM DIODE CURRENT PER PLATE WITH 10 VOLTS DC APPLIED	0.8	MA.
MAXIMUM DIODE CURRENT PER PLATE FOR CONTINUOUS OPERATION	1.0	MA.

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

CONTINUED NEXT PAGE

TUNG-SOL

DIRECT INTERELECTRODE CAPACITANCES⁵

INPUT: CONTROL GRID (G) TO ALL OTHER ELECTRODES EXCEPT PLATE (P)	5.6	μμf
OUTPUT: PLATE (P) TO ALL OTHER ELECTRODES EXCEPT CONTROL GRID (G)	5.3	μμf
CONTROL GRID (G) TO PLATE (P)	0.004 ^{MAX.}	μμf
DIODE #1 TO CONTROL GRID (G)	0.005 ^{MAX.}	μμf
DIODE #2 TO CONTROL GRID (G)	0.002 ^{MAX.}	μμf

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

PENTODE UNIT - CLASS A₁ AMPLIFIER

HEATER VOLTAGE	12.6	12.6	VOLTS
HEATER CURRENT	0.15	0.15	AMPERE
PLATE (P) VOLTAGE	100	250	VOLTS
SCREEN (G _s) VOLTAGE	100	100	VOLTS
CONTROL GRID (G) VOLTAGE	-1	-1	VOLTS
PLATE CURRENT	5.5	5.7	MA.
SCREEN CURRENT	2.2	2.1	MA.
PLATE RESISTANCE ^{APPROX.}	0.35	1.0	MEG OHM
TRANSCONDUCTANCE	3000	3200	μMHOS
CONTROL GRID VOLTAGE FOR	-16	-20	VOLTS

TRANSCONDUCTANCE = 2 μMHOS

⁵ WITH EXTERNAL SHIELD CONNECTED TO CATHODE.