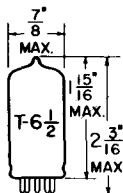


TUNG-SOL**DOUBLE-DIODE-TETRODE**

MINIATURE TYPE

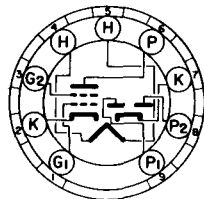
**GLASS BULB**

COATED UNIPOTENTIAL CATHODE

HEATER

12.6 VOLTS 0.325 AMP. ←
AC OR DC

ANY MOUNTING POSITION

**BOTTOM VIEW**
MINIATURE BUTTON
9 PIN BASE

96C

THE 12J8 IS A MINIATURE DOUBLE-DIODE TETRODE DESIGNED FOR USE IN AUTO-MOBILE RECEIVERS. IT IS RATED FOR OPERATION FROM A 12.0 VOLT BATTERY SOURCE.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD**TETRODE**

GRID TO PLATE

INPUT: G_1 TO $(H+TK+G_2)$ OUTPUT: P TO $(H+TK+G_2)$

#2 DIODE PLATE TO TETRODE GRID #1 (MAX.)

#1 DIODE PLATE TO TETRODE GRID #1 (MAX.)

0.70 ← μf 10.5 ← μf 4.4 ← μf 0.015 μf 0.04 μf **RATINGS**

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE^A

12.6 VOLTS

MAXIMUM HEATER-CATHODE VOLTAGE

HEATER POSITIVE WITH RESPECT TO CATHODE

30 VOLTS

HEATER NEGATIVE WITH RESPECT TO CATHODE

30 VOLTS

MAXIMUM PLATE VOLTAGE

30 VOLTS

MAXIMUM GRID #2 VOLTAGE

30 VOLTS

MAXIMUM GRID #1 RESISTANCE

10 MEGOHMS

MAXIMUM AVERAGE DIODE CURRENT (EACH DIODE)

5.0 MA.

^A THIS TUBE IS INTENDED TO BE USED IN AUTOMOTIVE SERVICE FROM A NOMINAL 12 VOLT BATTERY SOURCE. THE HEATER IS THEREFORE DESIGNED TO OPERATE OVER THE 10.0 TO 15.9 VOLTAGE RANGE ENCOUNTERED IN THIS SERVICE. THE MAXIMUM RATINGS OF THE TUBE PROVIDE FOR AN ADEQUATE SAFETY FACTOR SUCH THAT THE TUBE WILL WITHSTAND THE WIDE VARIATION IN SUPPLY VOLTAGES.

→ INDICATES A CHANGE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

HEATER VOLTAGE	12.6	VOLTS
HEATER CURRENT	0.325	← AMP.
GRID #1 VOLTAGE	0	VOLTS
GRID #2 VOLTAGE	12.6	VOLTS
GRID #1 RESISTOR	2.2	MEGOHMS
GRID #1 RESISTOR BYPASS CONDENSER	1.0	μf
TRANSCONDUCTANCE	5 500	← μMHOS
PLATE RESISTANCE (APPROX.)	6 000	← OHMS
ZERO SIGNAL PLATE CURRENT	12	← MA.
ZERO SIGNAL GRID #2 CURRENT	1.5	← MA.
AF GRID #1 VOLTAGE (RMS)	1.6	VOLTS
LOAD RESISTANCE	2 700	← OHMS
MAXIMUM SIGNAL POWER OUTPUT	20	MW.
TOTAL HARMONIC DISTORTION	5	PERCENT
AVERAGE #1 DIODE CURRENT AT 5 VOLTS DC	8.5	MA.
AVERAGE #2 DIODE CURRENT AT 5 VOLTS DC	12.0	MA.