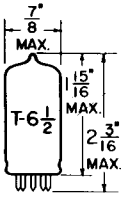
TUNG-SOL

DOUBLE-DIODE-TETRODE

MINIATURE TYPE

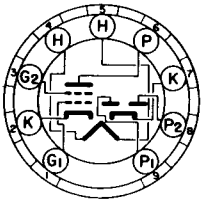


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
12.6 VOLTS 0.325 AMP. ←
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
9 PIN BASE
9GC

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

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

TETRODE

GRID TO PLATE	0.70 ←	μμf
INPUT: G_1 TO (H+TK+G_2)	10.5 ←	μμf
OUTPUT: P TO (H+TK+G_2)	4.4 ←	μμf
		μμf
#2 DIODE PLATE TO TETRODE GRID #1 (MAX.)	0.015	μμf
#1 DIODE PLATE TO TETRODE GRID #1 (MAX.)	0.04	μμf

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.