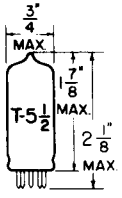
TUNG-SOL

DOUBLE DIODE TRIODE

MINIATURE TYPE

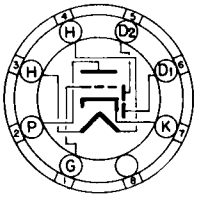


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
12.6 VOLTS 0.15 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
7 PIN BASE
7F8

THE 12EL6 IS A DOUBLE DIODE, HIGH-MU TRIODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE PRIMARILY AS A SECOND DETECTOR AUDIO AMPLIFIER IN OPERATION WHERE THE HEATER AND PLATE VOLTAGE ARE SUPPLIED DIRECTLY FROM A 12 VOLT AUTOMOTIVE STORAGE BATTERY.

DIRECT INTERELECTRODE CAPACITANCES
WITHOUT EXTERNAL SHIELD

GRID TO PLATE	1.8	μμf
INPUT: G TO (H+K)	2.2	μμf
OUTPUT: P TO (H+K)	1.0	μμf
DIODE PLATE TO DIODE PLATE	1.0	μμf

RATINGS
INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE[A]	12.6	VOLTS
MAXIMUM PLATE VOLTAGE	30	VOLTS
MAXIMUM CATHODE CURRENT	20	MA.
MAXIMUM GRID CIRCUIT RESISTANCE	10	MEGOHMS
MAXIMUM AVERAGE DIODE CURRENT	1.0	MA.
MAXIMUM HEATER-CATHODE VOLTAGE		
HEATER NEGATIVE WITH RESPECT TO CATHODE	30	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE	30	VOLTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS
CLASS A_1 AMPLIFIER

HEATER VOLTAGE	12.6	VOLTS
HEATER CURRENT	0.15	AMP.
PLATE VOLTAGE	12.6	VOLTS
GRID VOLTAGE	0	VOLTS
PLATE CURRENT	750	μA.
TRANSCONDUCTANCE	1 200	μMHOS
AMPLIFICATION FACTOR	55	
PLATE RESISTANCE	45 000	OHMS
AVERAGE DIODE CURRENT WITH 10 VOLTS APPLIED (EACH DIODE)[B]	2.0	MA.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS - CONT'D.

RESISTANCE COUPLED AMPLIFIER

HEATER VOLTAGE	12.6	VOLTS
HEATER CURRENT	0.15	AMPL
PLATE SUPPLY VOLTAGE	12.6	VOLTS
GRID VOLTAGE[C]		
GRID RESISTOR	1.0	MEGOHM
PLATE LOAD RESISTOR	1.0	MEGOHM
INPUT CAPACITOR	0.02	μf
OUTPUT CAPACITOR	0.01	μf
GRID RESISTOR OF FOLLOWING STAGE	2.0	MEGOHMS
VOLTAGE GAIN AT 400 CPS[D]	16	

[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.

[B] TEST CONDITION ONLY.

[C] CONTACT POTENTIAL DEVELOPED ACROSS SPECIFIED GRID RESISTOR.

[D] MEASURED AT AN OUTPUT VOLTAGE OF 1.0 VOLT RMS.