

TUNG-SOL

PENTODE

MINIATURE TYPE

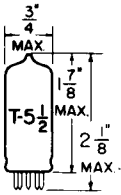
COATED UNIPOTENTIAL CATHODE

HEATER

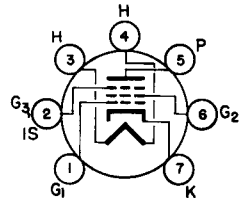
12.6 VOLTS 0.15 AMP.

AC OR DC

ANY MOUNTING POSITION



GLASS BULB
MINIATURE BUTTON
7 PIN BASE E7-1
OUTLINE DRAWING
JEDEC 5-2



BOTTOM VIEW
BASING DIAGRAM
Ⓢ JEDEC 78K

→ THE 12BL6 IS A REMOTE CUT-OFF PENTODE WITH A UNIPOTENTIAL CATHODE IN THE 7-PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR USE AS AN RF OR IF AMPLIFIER WHERE THE HEATER, PLATE AND SCREEN GRID POTENTIALS ARE OBTAINED DIRECTLY FROM AN AUTOMOTIVE BATTERY.

DIRECT INTERELECTRODE CAPACITANCES

GRID TO PLATE: (MAX.)
INPUT:
OUTPUT:

WITH SHIELD[Ⓢ]
0.006 pf
5.5 pf
4.8 pf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

MAXIMUM HEATER-CATHODE VOLTAGE	±30	VOLTS
MAXIMUM PLATE VOLTAGE	30	VOLTS
MAXIMUM GRID #2 VOLTAGE	30	VOLTS
MAXIMUM CATHODE CURRENT	20	MA.
MAXIMUM GRID #1 CIRCUIT RESISTANCE	10	MEG OHMS

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.

[Ⓢ]WITH SHIELD #316.

→ INDICATES A CHANGE.

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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

PLATE VOLTAGE	12.6	VOLTS
GRID #3 VOLTAGE*	0	VOLTS
GRID #2 VOLTAGE	12.6	VOLTS
GRID #1 VOLTAGE ^A	-0.65	VOLTS
PLATE CURRENT	1 350	μAMPS
GRID #2 CURRENT	500	μAMPS
PLATE RESISTANCE (APPROX.)	.5	MEGOHM
TRANSCONDUCTANCE ^B	1 350	μMHOS
GRID #1 VOLTAGE (APPROX.)		
FOR $G_m^B = 10 \mu\text{MHOS}$	-6.0	VOLTS
GRID #1 & #3 VOLTAGE (APPROX.)		
FOR $G_m^B = 10 \mu\text{MHOS}$	-5.0	VOLTS

^A AVERAGE CONTACT POTENTIAL DEVELOPED ACROSS A 2.2 MEGOHM GRID RESISTOR.

^B FROM GRID #1 TO PLATE.

* CONNECTED TO CATHODE AT SOCKET.