

TUNG-SOL

DOUBLE-DIODE TRIODE

MINIATURE TYPE

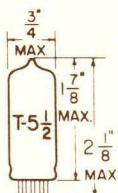
COATED UNIPOTENTIAL CATHODE

HEATER

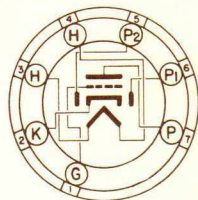
12.6 VOLTS 0.15 AMP.

AC OR DC

ANY MOUNTING POSITION



GLASS BULB


 BOTTOM VIEW
 MINIATURE BUTTON
 7 PIN BASE

7BT

THE 12AJ6 IS A COMBINED DOUBLE DIODE DETECTOR AND HIGH MU TRIODE WITH A COMMON UNIPOTENTIAL CATHODE IN THE 7-PIN MINIATURE CONSTRUCTION. THE TRIODE SECTION IS INTENDED FOR USE AS AN AF VOLTAGE AMPLIFIER WHERE THE HEATER AND PLATE POTENTIALS ARE OBTAINED DIRECTLY FROM AN AUTOMOTIVE BATTERY.

DIRECT INTERELECTRODE CAPACITANCES

	WITHOUT SHIELD	
GRID TO PLATE: (G TO P)	2.0	$\mu\mu\text{f}$
INPUT: G TO (H + K)	2.2	$\mu\mu\text{f}$
OUTPUT: P TO (H + K)	0.8	$\mu\mu\text{f}$
DIODE TO DIODE	.9	$\mu\mu\text{f}$

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	12.6	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE	± 30	VOLTS
MAXIMUM PLATE VOLTAGE	30	VOLTS
MAXIMUM CATHODE CURRENT	20	MA.
MAXIMUM AVERAGE DIODE CURRENT	1	MA.
MAXIMUM GRID CIRCUIT RESISTANCE	10	MEGOHMS

 TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS
 CLASS A₁ AMPLIFIER - TRIODE UNIT

HEATER VOLTAGE	12.6	VOLTS
HEATER CURRENT	0.15	AMP.
PLATE VOLTAGE	12.6	VOLTS
GRID VOLTAGE	0	VOLTS
PLATE CURRENT	750	μAMPS
PLATE RESISTANCE	45 000	OHMS
TRANSCONDUCTANCE	1 200	μMHOS
AMPLIFICATION FACTOR	.55	

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TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS - CONT'D

DIODE UNITS - TWO

AVERAGE DIODE CURRENT WITH		
10 VOLTS APPLIED (EACH DIODE)	2.0	MA.

RESISTANCE COUPLED AMPLIFIER - TRIODE UNIT

HEATER VOLTAGE	12.6	VOLTS
HEATER CURRENT	0.15	AMP.
PLATE SUPPLY VOLTAGE	12.6	VOLTS
CONTROL GRID VOLTAGE	0	VOLTS
PLATE LOAD RESISTOR	1.0	MEGOHMS
CONTROL GRID RESISTOR	1.0	MEGOHMS
INPUT CONDENSER	0.02	μ f
OUTPUT CONDENSER	0.01	μ f
GRID RESISTOR OF FOLLOWING STAGE	2.0	MEGOHMS
VOLTAGE GAIN AT 400 CPS**	16	

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.

** MEASURED AT AN OUTPUT VOLTAGE OF 1 VOLT RMS.

