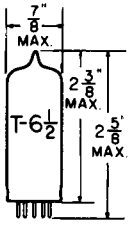
TUNG-SOL

BEAM PENTODE

MINIATURE TYPE

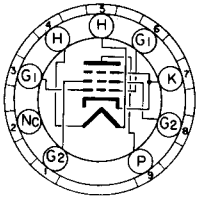


GLASS BULB

COATED UNIPOTENTIAL CATHODE

HEATER
12.6 VOLTS[A] 0.2 AMP.
AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
9 PIN BASE
9EU

THE 12AB5 IS A BEAM POWER TUBE USING THE 9 PIN MINIATURE CONSTRUCTION DESIGNED FOR USE AS AN AUDIO POWER AMPLIFIER IN AUTOMOBILE RADIO SERVICE WHERE THE POWER SOURCE IS A 12 VOLT BATTERY.

DIRECT INTERELECTRODE CAPACITANCES — APPROX.

GRID TO PLATE: G TO P	0.7	μμf
INPUT: G_1 TO (H+K+G_2&G_3)	8.0	μμf
OUTPUT: P TO (H+K+G_2&G_3)	8.5	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	12.6	VOLTS
MAXIMUM HEATER—CATHODE VOLTAGE:		
NEGATIVE (DC)	200	VOLTS
POSITIVE (DC)	100	VOLTS
MAXIMUM PLATE VOLTAGE	315	VOLTS
MAXIMUM GRID #2 VOLTAGE	285	VOLTS
MAXIMUM PLATE DISSIPATION	12	WATTS
MAXIMUM GRID #2 DISSIPATION	2	WATTS
MAXIMUM GRID #1 CIRCUIT RESISTANCE:		
FIXED BIAS	0.1	MEGOHM
CATHODE BIAS	0.5	MEGOHM
MAXIMUM BULB TEMPERATURE	250	°C.

OPERATING CONDITIONS AND CHARACTERISTICS[A]

CLASS A_1 AMPLIFIER — SINGLE TUBE

HEATER VOLTAGE[A]	12.6	12.6	VOLTS
HEATER CURRENT	0.2	0.2	AMP.
PLATE VOLTAGE	250	250	VOLTS
GRID #2 VOLTAGE	200	250	VOLTS
GRID #1 VOLTAGE	---	-12.5	VOLTS
CATHODE BIAS RESISTOR	270	---	OHMS
PEAK AF GRID #1 VOLTAGE	10.5	12.5	VOLTS
ZERO-SIGNAL PLATE CURRENT	33.5	45	MA.
MAXIMUM SIGNAL PLATE CURRENT	36.0	47	MA.
ZERO-SIGNAL GRID #2 CURRENT	1.6	4.5	MA.
MAXIMUM SIGNAL GRID #2 CURRENT	3.2	7.0	MA.
PLATE RESISTANCE	---	50	KILOHMS
TRANSCONDUCTANCE	4 000	4 100	μMHOS
LOAD RESISTANCE	6 000	5 000	OHMS
POWER OUTPUT (MAXIMUM SIGNAL)	3.3	4.5	WATTS
TOTAL HARMONIC DISTORTION	12	8	PERCENT

[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.