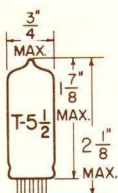


TUNG-SOL

DIODE PENTODE



GLASS BULB

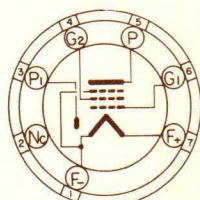
COATED FILAMENT

FILAMENT

1.4 VOLTS 50 MA.

DC

ANY MOUNTING POSITION



BOTTOM VIEW
MINIATURE BUTTON
7 PIN BASE
6AU

THE 1S5 IS A DIODE PENTODE AMPLIFIER ESPECIALLY DESIGNED FOR DETECTOR-AUDIO SERVICE IN COMPACT, LIGHT-WEIGHT, PORTABLE EQUIPMENT. THE HIGH OPERATING EFFICIENCY ALLOWS IT TO BE USED WITH EXTREMELY LOW PLATE-SUPPLY VOLTAGE.

DIRECT INTERELECTRODE CAPACITANCES ←

DIODE PLATE TO GRID #1 A	0.1	μuf
DIODE PLATE TO FILAMENT & PIN #2 B	1.1	μuf

RATINGS

INTERPRETED ACCORDING TO DESIGN-MAXIMUM SYSTEM

FILAMENT VOLTAGE	1.4	VOLTS
MAXIMUM PLATE VOLTAGE	90	VOLTS
MAXIMUM GRID #2 VOLTAGE	90	VOLTS
MAXIMUM CATHODE CURRENT	3	MA.
MAXIMUM DIODE CURRENT FOR CONTINUOUS OPERATION	0.25	MA.
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	0	VOLTS
MAXIMUM NEGATIVE DC GRID #1 VOLTAGE	-50	VOLTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER - PENTODE UNIT

FILAMENT VOLTAGE	1.4	VOLTS
FILAMENT CURRENT	50	MA.
PLATE VOLTAGE	67.5	VOLTS
GRID #2 VOLTAGE	67.5	VOLTS
GRID #1 VOLTAGE	0	VOLTS
PLATE RESISTANCE (APPROX.)	0.6	MEGOHM
TRANSCONDUCTANCE	625	μMHOS
PLATE CURRENT	1.6	MA.
GRID #2 CURRENT	0.4	MA.
GRID #1 VOLTAGE (APPROX.) FOR $I_b = 10 \mu A$ DC	-5	VOLTS
AVERAGE DIODE CURRENT AT 10 VOLTS DC	1.5	MA.

CONTINUED ON FOLLOWING PAGE

A WITHOUT EXTERNAL SHIELD OR WITH EXTERNAL SHIELD #316 CONNECTED TO PIN #1.

B WITHOUT EXTERNAL SHIELD.

→ INDICATES A CHANGE.

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS
RESISTANCE COUPLED AMPLIFIER
PENTODE UNIT

FILAMENT VOLTAGE	1.4	1.4	VOLTS
PLATE SUPPLY VOLTAGE	45	90	VOLTS
SCREEN SUPPLY VOLTAGE	45	90	VOLTS
CONTROL GRID VOLTAGE	0	0	VOLTS
PLATE LOAD RESISTOR	470 000	470 000	OHMS
CONTROL GRID RESISTOR	10	10	MEGOHMS
SERIES SCREEN RESISTOR	2.2	2.2	MEGOHMS
SCREEN BY-PASS CONDENSER	0.1	0.1	μ f
INPUT CONDENSER	0.01	0.01	μ f
OUTPUT CONDENSER	0.01	0.01	μ f
GRID RESISTOR OF FOLLOWING STAGE	1.0	1.0	MEGOHMS
SIGNAL SOURCE IMPEDANCE (MAX.)	1000	1000	OHMS
DISTORTION	5	5	PERCENT
OUTPUT VOLTAGE	5.5	17.0	VOLTS
VOLTAGE GAIN AT 400 CPS	33	50	

