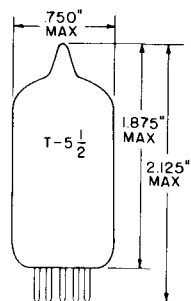


TUNG-SOL

DIODE PENTODE



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

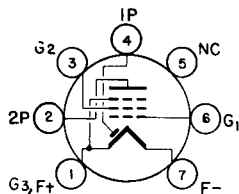
COATED FILAMENT

FILAMENT

1.4 VOLTS 50 MA.

DC

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 6BW

THE 105 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 ←

PENTODE GRID #1 TO DIODE PLATE (PG1 TO DP) MAX. 0.04 pf

FILAMENT CHARACTERISTICS AND RATINGS*

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS 1.4 VOLTS 50 MA.

FILAMENT SUPPLY LIMITS:

VOLTAGE OPERATION: 1.5 VOLT DRY CELL SUPPLY 1.1 TO 1.6 VOLTS
OTHER BATTERY SUPPLIES OR POWER LINE 1.1 TO 1.5 VOLTS

MAXIMUM RATINGS ←

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

PENTODE PLATE VOLTAGE 100 VOLTS
PENTODE GRID #2 VOLTAGE 100 VOLTS
CATHODE CURRENT 5.3 MA.
DIODE PLATE CURRENT 0.28 MA.

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER - PENTODE UNIT

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 μA DC	-5	VOLTS
AVERAGE DIODE CURRENT AT 10 VOLTS DC	1.5	MA.

CONTINUED ON FOLLOWING PAGE

* WITH SHIELD #316 CONNECTED TO PIN #1 OR WITHOUT EXTERNAL SHIELD

- INDICATES A CHANGE.

* INDICATES AN ADDITION.

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

RESISTANCE COUPLED AMPLIFIER

PENTODE UNIT

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	μf
INPUT CONDENSER	0.01	0.01	μf
OUTPUT CONDENSER	0.01	0.01	μf
GRID RESISTOR OF FOLLOWING STAGE	1.0	1.0	MEGOHM
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	

