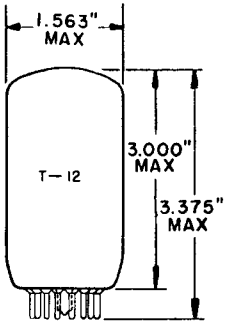
TUNG-SOL

PENTODE

COMPACTRON

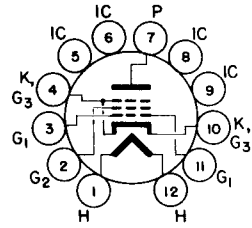


GLASS BULB

BUTTON 12 PIN
BASE E12-74
OUTLINE DRAWING
JEDEC 12-58

BEAM PENTODE
FOR
HORIZONTAL-DEFLECTION
AMPLIFIER
APPLICATIONS
IN T.V. RECEIVERS

COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION



BOTTOM VIEW

BASING DIAGRAM
JEDEC 12 BJ

THE 6HB5 IS A BEAM PENTODE IN THE T-12 COMPACTRON CONSTRUCTION. IT IS DESIGNED SPECIFICALLY FOR USE AS THE HORIZONTAL-DEFLECTION AMPLIFIER IN T.V. RECEIVERS. EXCEPT FOR HEATER CHARACTERISTICS AND RATINGS, THE 6HB5 IS IDENTICAL TO THE 21HB5.

DIRECT INTERELECTRODE CAPACITANCES

WITHOUT EXTERNAL SHIELD

GRID 1 TO PLATE: (G1 TO P)	0.4	pf
INPUT: G1 TO (H + K + G2 + G3)	22	pf
OUTPUT: P TO (H + K + G3 + G3)	9.0	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3 VOLTS	1.5	AMPS
LIMITS OF APPLIED VOLTAGE	6.3 ± 0.6		VOLTS
HEATER - CATHODE VOLTAGE			
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC COMPONENT		100	VOLTS
TOTAL DC AND PEAK		200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE			
TOTAL DC AND PEAK		200	VOLTS

CONTINUED ON FOLLOWING PAGE

CONTINUED ON PRECEDING PAGE

MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

HORIZONTAL-DEFLECTION AMPLIFIER SERVICE

DC PLATE-SUPPLY VOLTAGE (BOOST + DC POWER SUPPLY)	770	VOLTS
PEAK POSITIVE PULSE PLATE VOLTAGE	6,000	VOLTS
PEAK NEGATIVE PULSE PLATE VOLTAGE	1,500	VOLTS
GRID 2 VOLTAGE	220	VOLTS
NEGATIVE DC GRID 1 VOLTAGE	55	VOLTS
PEAK NEGATIVE GRID 1 VOLTAGE	330	VOLTS
PLATE DISSIPATION [A]	18	WATTS
GRID 2 DISSIPATION	3.5	WATTS
DC CATHODE CURRENT	230	MA.
PEAK CATHODE CURRENT	800	MA.
GRID 1 CIRCUIT RESISTANCE	1.0	MEGOHMS
BULB TEMPERATURE AT HOTTEST POINT	220	°C

A- IN STAGES OPERATING WITH GRID-LEAK BIAS, AN ADEQUATE CATHODE-BIAS RESISTOR OR OTHER SUITABLE MEANS IS REQUIRED TO PROTECT THE TUBE IN THE ABSENCE OF EXCITATION.

CHARACTERISTICS AND TYPICAL OPERATION

PLATE VOLTAGE	5,000	60	130	VOLTS
GRID 2 VOLTAGE	130	130	130	VOLTS
GRID 1 VOLTAGE	-	0 [B]	-20	VOLTS
PLATE CURRENT	-	410	50	MA.
GRID 2 CURRENT	-	24	1.75	MA.
TRANSCONDUCTANCE	-	-	9,100	μMHOS
PLATE RESISTANCE	-	-	Approx. 11,000	OHMS
GRID 1 VOLTAGE FOR I_b = 1.0 MA. -APPROX.	-66	-	-33	VOLTS
TRIODE AMPLIFICATION FACTOR [C]	-	-	4.7	

B- APPLIED FOR SHORT INTERVAL (2 SECONDS) SO AS NOT TO DAMAGE TUBE.

C- TRIODE CONNECTION (GRID 2 TIED TO PLATE) WITH $E_b = E_{c2} = 130$ VOLTS AND $E_{c1} = -20$ VOLTS.