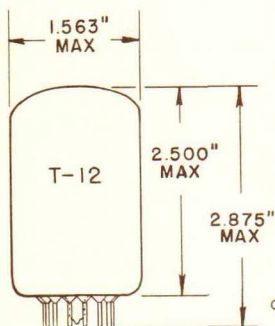


TUNG-SOL

PENTODE

COMPACTRON

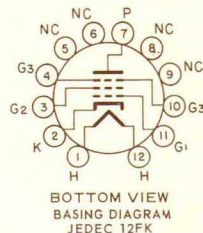


GLASS BULB
12 PIN BASE E12-74
OUTLINE DRAWING
JEDEC 12-56

BEAM PENTODE
FOR
HORIZONTAL-DEFLECTION
AMPLIFIER APPLICATIONS
IN TV RECEIVERS

COATED UNIPOTENTIAL CATHODE

ANY MOUNTING POSITION



THE 12JN6 IS A BEAM-POWER PENTODE IN THE T-12 COMPACTRON CONSTRUCTION. IT IS DESIGNED PRIMARILY FOR USE AS THE HORIZONTAL-DEFLECTION AMPLIFIER IN TELEVISION RECEIVERS. A SEPARATE CONNECTION IS PROVIDED FOR THE BEAM PLATES (GRID 3) TO MINIMIZE "SNIVETS".

EXCEPT FOR HEATER CHARACTERISTICS AND RATINGS, THE 12JN6 IS IDENTICAL TO THE 6JN6.

DIRECT INTERELECTRODE CAPACITANCES WITHOUT EXTERNAL SHIELD

GRID 1 TO PLATE: G1 TO P	0.34	pf
INPUT: G1 TO (H + K + G2 + G3)	16	pf
OUTPUT: P TO (H + K + G2 + G3)	7.0	pf

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	12.6 VOLTS	600	MA.
HEATER WARM-UP TIME		11	SECONDS
LIMITS OF SUPPLIED CURRENT		600 ± 40	MA.
MAXIMUM HEATER - CATHODE VOLTAGE:			
HEATER NEG. W/ RESPECT TO CATHODE			
TOTAL DC AND PEAK		200	VOLTS
HEATER POS. W/ RESPECT TO CATHODE			
DC		100	VOLTS
TOTAL DC AND PEAK		200	VOLTS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS

DESIGN MAXIMUM RATINGS - SEE EIA STANDARD RS-239

HORIZONTAL-DEFLECTION AMPLIFIER SERVICE

DC PLATE - SUPPLY VOLTAGE (BOOST + DC POWER SUPPLY)	770	VOLTS
PEAK POSITIVE PULSE PLATE VOLTAGE	6,500	VOLTS
PEAK NEGATIVE PULSE PLATE VOLTAGE	1,500	VOLTS
POSITIVE DC GRID 3 VOLTAGE	70	VOLTS
GRID 2 VOLTAGE	220	VOLTS
NEGATIVE DC GRID 1 VOLTAGE	55	VOLTS
PEAK NEGATIVE GRID 1 VOLTAGE	330	VOLTS
PLATE DISSIPATION ^A	17.5	WATTS
GRID 2 DISSIPATION	3.5	WATTS
DC CATHODE CURRENT	175	MA.
PEAK CATHODE CURRENT	550	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	250	VOLTS
GRID 3 - CONNECTED TO CATHODE AT SOCKET				
GRID 2 VOLTAGE	150	150	150	VOLTS
GRID 1 VOLTAGE	-	0 ^B	-22.5	VOLTS
PLATE CURRENT	-	345	65	MA.
GRID 2 CURRENT	-	27	1.8	MA.
TRANSCONDUCTANCE	-	-	7,300	μ MHOS
PLATE RESISTANCE - APPROX.	-	-	18,000	OHMS
GRID 1 VOLTAGE AT $I_b = 1.0$ MA. - APPROX.	-100	-	-42	VOLTS
TRIODE AMPLIFICATION FACTOR ^C	-	-	4.4	

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

C - TRIODE CONNECTION (GRID 2 TIED TO PLATE) WITH $E_b = E_{c2} = 150$ VOLTS AND $E_{c1} = -22.5$ VOLTS

