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
MAXIMUM HEATER - CATHODE VOLTAGE:
HEATER NEG. W/ RESPECT TO CATHODE 600 ± 40 MA.
TOTAL DC AND PEAK 200 VOLTS
HEATER POS. W/ RESPECT TO CATHODE
DC 100 VOLTS
TOTAL DC AND PEAK 200 VOLTS

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MAXIMUM RATINGS
DESIGN MAXIMUM RATINGS - SEE EIA STANDARD RS-229
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 3 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 μA/HOS
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 \( E_b = E_{e2} = 150 \) VOLTS AND \( E_{e1} = -22.5 \) VOLTS
AVERAGE TRANSFER CHARACTERISTICS

$E_B = 250$ VOLTS
GRID 3 TIED TO CATHODE

PLATE MILLIAMPERES

GRID 1 VOLTS

TUNG-SOL ELECTRIC INC., ELECTRON TUBE DIVISION, BLOOMFIELD, NEW JERSEY, U.S.A.