TUNG-SOL

TRIODE

MINIATURE TYPE

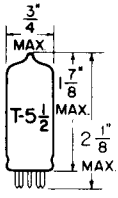
COATED UNIPOTENTIAL CATHODE

HEATER

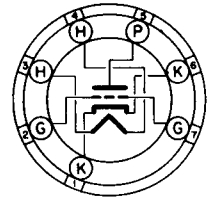
6.3±10% VOLTS 0.2 AMP.

AC OR DC

ANY MOUNTING POSITION



GLASS BULB



BOTTOM VIEW

MINIATURE BUTTON
7 PIN BASE

7EG

THE 6BN4 AND 6BN4A ARE MINIATURE MEDIUM-MU TRIODES DESIGNED FOR USE AS RADIO-FREQUENCY AMPLIFIERS IN VHF TELEVISION TUNERS. EXCEPT FOR THE HIGHER TRANSCONDUCTANCE AND LOWER PLATE RESISTANCE OF THE 6BN4A, THE TUBES ARE IDENTICAL.

DIRECT INTERELECTRODE CAPACITANCES

WITH EXTERNAL SHIELD #316

GRID TO PLATE	1.2	μμf
INPUT	3.2	μμf
OUTPUT	1.4	μμf
HEATER TO CATHODE	2.8	μμf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	6.3±10%	VOLTS
MAXIMUM PLATE VOLTAGE	275	VOLTS
MAXIMUM DC GRID VOLTAGE	0	VOLTS
MAXIMUM PLATE DISSIPATION	2.2	WATTS
MAXIMUM DC CATHODE CURRENT	22	MA.
MAXIMUM HEATER-CATHODE VOLTAGE		
HEATER POSITIVE WITH RESPECT TO CATHODE	100	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE	100	VOLTS
MAXIMUM GRID CIRCUIT RESISTANCE	0.5	MEGOHMS
HEATER WARM-UP TIME*	11	SECONDS

*HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.

DESIGN-MAXIMUM RATINGS ARE THE LIMITING VALUES EXPRESSED WITH RESPECT TO BOGIE TUBES AT WHICH SATISFACTORY TUBE LIFE CAN BE EXPECTED TO OCCUR. TO OBTAIN SATISFACTORY CIRCUIT PERFORMANCE, THEREFORE, THE EQUIPMENT DESIGNER MUST ESTABLISH THE CIRCUIT DESIGN SO THAT NO DESIGN-MAXIMUM VALUE IS EXCEEDED WITH A BOGIE TUBE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, AND ENVIRONMENTAL CONDITIONS.

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TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	6.3±10%	VOLTS
HEATER CURRENT	0.2	AMP.
PLATE VOLTAGE	150	VOLTS
CATHODE-BIAS RESISTOR	220	OHMS
AMPLIFICATION FACTOR	43	
PLATE RESISTANCE (APPROX.) FOR 6BN4	6 300	OHMS
PLATE RESISTANCE (APPROX.) FOR 6BN4A	5 400	OHMS
TRANSCONDUCTANCE (FOR 6BN4)	6 800	μMHOS
TRANSCONDUCTANCE (FOR 6BN4A)	7700 ←	μMHOS
PLATE CURRENT	9.0	MA.
GRID VOLTAGE (APPROX.) I_b = 100 μAMPS.	-6	VOLTS

→ INDICATES A CHANGE.