

TUNG-SOL

TRIODE-PENTODE
MINIATURE TYPE

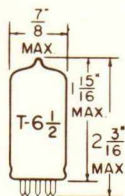
COATED UNIPOTENTIAL CATHODE

HEATER

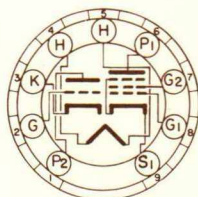
4.7 VOLTS 0.6 AMP.

AC OR DC

ANY MOUNTING POSITION



GLASS BULB



BOTTOM VIEW

MINIATURE BUTTON
9 PIN BASE

THE 5AN8 IS A GENERAL PURPOSE, MULTI-UNIT TUBE USING THE 9 PIN MINIATURE CONSTRUCTION. CONTAINING A MEDIUM-MU TRIODE AND A SHARP-CUTOFF PENTODE IN ONE ENVELOPE, IT IS DESIGNED FOR USE IN 600 MA. SERIES HEATER OPERATED RECEIVERS. IT IS INTENDED FOR A WIDE VARIETY OF APPLICATIONS IN COLOR TELEVISION RECEIVERS. THERMAL CHARACTERISTICS OF THE HEATER ARE CONTROLLED SUCH THAT HEATER VOLTAGE SURGES DURING THE WARM-UP CYCLE ARE MINIMIZED PROVIDED IT IS USED WITH OTHER TYPES WHICH ARE SIMILARLY CONTROLLED. WITH THE EXCEPTION OF HEATER RATINGS, ITS CHARACTERISTICS ARE IDENTICAL TO THE 6AN8.

DIRECT INTERELECTRODE CAPACITANCES
WITH NO EXTERNAL SHIELD

TRIODE UNIT

GRID TO PLATE

1.5 μf

INPUT

2.0 μf

OUTPUT

0.27 μf

PENTODE UNIT

GRID #1 TO PLATE (MAX.)

0.04 μf

INPUT

7.0 μf

OUTPUT

2.3 μf

TRIODE GRID TO PENTODE PLATE

0.005 μf

PENTODE GRID #1 TO TRIODE PLATE

0.006 μf

PENTODE PLATE TO TRIODE PLATE

0.045 μf

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

CLASS A₁ AMPLIFIER — DESIGN CENTER VALUES

	TRIODE UNIT	4.7	PENTODE UNIT	VOLTS
HEATER VOLTAGE				
MAXIMUM PEAK HEATER-CATHODE VOLTAGE:				
HEATER NEGATIVE WITH RESPECT TO CATHODE				
TOTAL DC AND PEAK	200		200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE				
DC	100		100	VOLTS
TOTAL DC AND PEAK	200 ^A		200 ^A	VOLTS
MAXIMUM PLATE VOLTAGE	300		300	VOLTS
MAXIMUM GRID #2 SUPPLY VOLTAGE	---		300	VOLTS
MAXIMUM GRID #2 VOLTAGE	---		SEE CURVE #1	
MAXIMUM GRID #1 VOLTAGE				
POSITIVE BIAS VALUE	0		0	VOLTS
MAXIMUM PLATE DISSIPATION	2.6	←	2.0	WATTS
MAXIMUM GRID #2 INPUT	---		0.5	WATT
MAXIMUM GRID #1 CIRCUIT RESISTANCE: ^B				
FOR CATHODE-BIAS OPERATION	1.0		1.0	MEGOHM
FOR FIXED-BIAS OPERATION	0.5		0.25	MEGOHM
HEATER WARM-UP TIME (APPROX.)*		11.0		SEC.

^A THE DC COMPONENT MUST NOT EXCEED 100 VOLTS.^B IF EITHER UNIT IS OPERATING AT MAXIMUM RATED CONDITIONS, GRID #1 CIRCUIT RESISTANCES FOR BOTH UNITS SHOULD NOT EXCEED THE STATED VALUES.

* 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.

→ INDICATES A CHANGE.

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CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

	TRIODE UNIT	PENTODE UNIT	
HEATER VOLTAGE		4.7	VOLTS
HEATER CURRENT		0.6	AMP.
PLATE SUPPLY VOLTAGE	200	200	VOLTS
GRID #2 SUPPLY VOLTAGE	---	150	VOLTS
GRID #1 VOLTAGE	-6	---	VOLTS
CATHODE BIAS RESISTOR	---	180	OHMS
AMPLIFICATION FACTOR	19	---	
PLATE RESISTANCE (APPROX.)	5 750	300 000	OHMS
TRANSCONDUCTANCE	3 300	6 200	μ MHOS
GRID #1 BIAS (APPROX.) FOR $I_b = 10 \mu A$.	-19	-8	VOLTS
PLATE CURRENT	13	9.5	MA.
GRID #2 CURRENT	---	2.8	MA.

