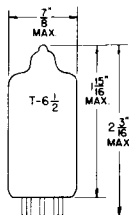


## TUNG-SOL

## TRIODE PENTODE

MINIATURE TYPE



GLASS BULB

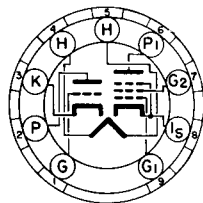
COATED UNIPOTENTIAL CATHODE

HEATER

4.7 VOLTS 0.6 AMP.

AC OR DC

ANY MOUNTING POSITION


**BOTTOM VIEW**  
 MINIATURE BUTTON  
 9 PIN BASE

9FA

THE 5BR8 COMPRISES TWO ELECTRICALLY INDEPENDENT SECTIONS -- A TRIODE AND A PENTODE -- IN THE 9 PIN MINIATURE CONSTRUCTION. BOTH UNITS ARE CAPABLE OF GOOD PERFORMANCE AT THE HIGHER FREQUENCIES. THE TUBE MAY BE USED AS A LOCAL OSCILLATOR PENTODE MIXER FOR FM OR TELEVISION RECEIVERS OR IN THE MANY COMBINED FUNCTIONS IN SUCH RECEIVERS. THE 5BR8 IS INTENDED FOR USE IN 600 MA. SERIES HEATER 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 THE HEATER VOLTAGE ITS CHARACTERISTICS ARE IDENTICAL TO THE 6BR8.

## DIRECT INTERELECTRODE CAPACITANCES

	WITH SHIELD #315	WITHOUT SHIELD	
<b>PENTODE UNIT:</b>			
GRID #1 TO PLATE	0.008	0.015 MAX.	$\mu$ uf
INPUT	5.0	5.0	$\mu$ uf
OUTPUT	3.5	2.6	$\mu$ uf
<b>TRIODE UNIT:</b>			
GRID TO PLATE	1.8	1.8	$\mu$ uf
GRID TO CATHODE	2.5	2.5	$\mu$ uf
PLATE TO CATHODE	1.0	0.4	$\mu$ uf
CATHODE TO HEATER (EITHER SECTION) APPROX.	3.0	3.0	$\mu$ uf

## RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

	TRIODE UNIT	PENTODE UNIT	
HEATER VOLTAGE	4.7		VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE; HEATER NEGATIVE WITH RESPECT TO CATHODE TOTAL DC AND PEAK	250	250	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE DC	100	100	VOLTS
TOTAL DC AND PEAK	200	200	VOLTS
MAXIMUM PLATE VOLTAGE	300	300	VOLTS
MAXIMUM GRID #2 VOLTAGE		300	VOLTS
MAXIMUM PLATE DISSIPATION	2.7	2.8	WATTS
MAXIMUM GRID #2 DISSIPATION		0.5	WATTS
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	---	0	VOLTS
MAXIMUM POSITIVE DC GRID VOLTAGE	0	---	VOLTS
HEATER WARM-UP TIME (APPROX.)*	11.0		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.

CONTINUED ON FOLLOWING PAGE

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

### TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

	TRIODE	PENTODE	
HEATER VOLTAGE		4.7	VOLTS
HEATER CURRENT		0.6	AMP.
PLATE VOLTAGE	150	250	VOLTS
GRID #2 VOLTAGE	---	110	VOLTS
CATHODE RESISTOR	56	68	OHMS
TRANSCONDUCTANCE	8 500	5 200	$\mu$ MHQS
GRID #1 VOLTAGE (APPROX.) FOR $I_b=10 \mu A$ .	-12	-10	VOLTS
PLATE CURRENT	18	10	MA.
GRID #2 CURRENT	---	3.5	MA.
PLATE RESISTANCE (APPROX.)	.005	0.40	MEGOHM
AMPLIFICATION FACTOR	40	---	