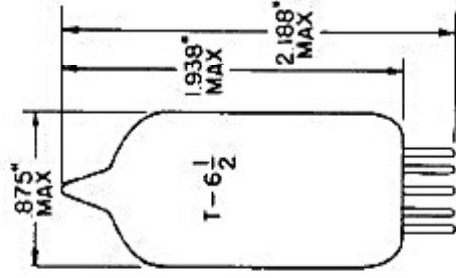


TUNG-SOL**TRIODE PENTODE
MINIATURE TYPE**

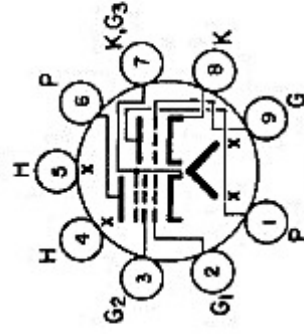
GLASS BULB
MINIATURE BUTTON
9 PIN BASE E9-1
OUTLINE DRAWING
JEDEC 6-2

COATED UNIPOTENTIAL CATHODE

FOR

APPLICATION IN FM
OR TV RECEIVERS

ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 9AE

THE 6U8 COMBINES TWO ELECTRICALLY INDEPENDENT SECTIONS-A TRIODE AND A PENTODE. IN THE 9 PIN MINIATURE CONSTRUCTION, BOTH UNITS ARE CAPABLE OF GOOD PERFORMANCE AT THE HIGH FREQUENCIES. THE TUBE MAY BE USED AS A LOCAL OSCILLATOR-PENTODE MIXER IN FM OR TELEVISION RECEIVERS OR IN THE MANY COMBINED FUNCTIONS OF SUCH RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES

	WITH SHIELD A	WITHOUT SHIELD
PENTODE GRID 1 TO PENTODE PLATE: (PG1 TO PP) MAX.	→ 0.007	→ 0.015
PENTODE INPUT: PG1 TO (H + PK + PG2 + PG3 + I, S.)	5.0	5.0
PENTODE OUTPUT: PP TO (H + PK + PG2 + PG3 + I, S.)	3.5	2.6
PENTODE CATHODE TO HEATER: H TO (PK + PG3 + I, S.)	3.0 ^B	3.0
TRIODE GRID TO TRIODE PLATE: (TG TO TP)	1.8	1.8
TRIODE INPUT: TG TO (TK + H + PK + PG3 + I, S.)	2.8	2.8
TRIODE OUTPUT: TP TO (TK + H + PK + PG3 + I, S.)	2.0	1.5
TRIODE CATHODE TO HEATER (TK TO H)	3.0 ^B	3.0
PENTODE GRID TO TRIODE PLATE (PG TO TP) (MAX.)	0.20	0.2
PENTODE PLATE TO TRIODE PLATE (PP TO TP) (MAX.)	0.02	0.1

HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS			
HEATER WARM-UP TIME °C	6.3 VOLTS	450	MA.
HEATER SUPPLY LIMITS:		11	SECONDS
VOLTAGE OPERATION	6.3±0.6		VOLTS
MAXIMUM HEATER CATHODE VOLTAGE: (EACH UNIT)		200	VOLTS
HEATER NEGATIVE WITH RESPECT TO CATHODE		100	VOLTS
TOTAL DC AND PEAK		200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE			
DC			
TOTAL DC AND PEAK			

CONTINUED FROM PRECEDING PAGE

→ MAXIMUM RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

PENTODE PLATE VOLTAGE	330	VOLTS
TRIODE PLATE VOLTAGE	330	VOLTS
GRID 2 SUPPLY VOLTAGE	330	VOLTS
GRID 2 VOLTAGE	SEE RATING CHART	
PENTODE PLATE DISSIPATION	3.0	WATTS
GRID 2 DISSIPATION: *	0.55	WATTS
FOR VOLTAGES UP TO 165 VOLTS		
FOR VOLTAGES BETWEEN 165 & 300 VOLTS	SEE RATING CHART	
POSITIVE DC GRID 1 VOLTAGE	0	VOLTS
POSITIVE DC TRIODE GRID VOLTAGE	0	VOLTS
TRIODE PLATE DISSIPATION	2.5	WATTS
PENTODE GRID 1 CIRCUIT RESISTANCE:*	1.0	MEGOHM
WITH CATHODE BIAS	0.5	MEGOHM
WITH FIXED BIAS		

TYPICAL OPERATING CHARACTERISTICS

CLASS A₁ AMPLIFIER

	TRIODE	PENTODE
PLATE VOLTAGE	125	125
GRID 2 VOLTAGE	----	-10
GRID 1 VOLTAGE	-1.0	-1.0
TRANSCONDUCTANCE	7500	5000
PLATE CURRENT	13.5	9.5
GRID 2 CURRENT	----	3.5
PLATE RESISTANCE (APPROX.)	40	0.2
AMPLIFICATION FACTOR	-9	----
GRID 1 VOLTAGE (APPROX.) FOR $I_b = 20 \mu A$		
ZERO BIAS TRANSCONDUCTANCE		
(WITH $E_b = 100 V$; $E_{c2} = 70 V$ *)		
	----	5500
		$\mu MHOS$

^A EXTERNAL SHIELD 315 CONNECTED TO PIN 4.^B EXTERNAL SHIELD 315 CONNECTED TO PIN 6.

THE 6UBA CURVES ALSO APPLY FOR THE 6UB.

→ INDICATES A CHANGE.

* INDICATES AN ADDITION.