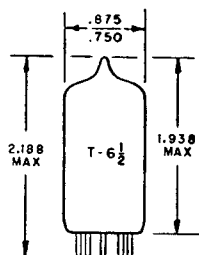


TUNG-SOL

TRIODE-PENTODE

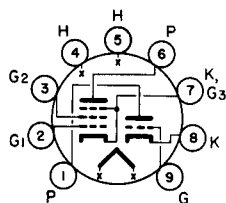
MINIATURE TYPE

FOR
USE AS A COMBINED
VHF OSCILLATOR AND MIXER



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

COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 9 AE

THE 6KD8 IS A MEDIUM MU TRIODE AND SHARP CUTOFF PENTODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS INTENDED FOR USE AS A COMBINED VHF OSCILLATOR AND MIXER IN TELEVISION RECEIVERS.

GRID 1 (CONTROL GRID) TO CATHODE SPACING ON THE 6KD8 IS OF SUCH LOW ORDER OF MAGNITUDE AS TO PRECLUDE THE USE OF VOLTAGE BETWEEN THESE ELEMENTS OF MORE THAN 100 VOLTS DC OR PEAK AC IN COMMERCIAL TUBE CHECKERS AND SHORTS INDICATING DEVICES, PARTICULARLY WHERE MECHANICAL EXCITATION OF THE TUBE IS EMPLOYED.

DIRECT INTERELECTRODE CAPACITANCES

PENTODE SECTION	SHIELD 315 CONNECTED TO PIN 4		UNSHIELDED	pf
	Max.	.007		
GRID 1 TO PLATE				
INPUT: G1 TO (H + K + G2 + G3 + I.S.)	5.0		5.0	pf
OUTPUT: P TO (H + K + G2 + G3 + I.S.)	3.5		2.6	pf
CATHODE TO HEATER	3.0 A		3.0	pf
TRIODE SECTION				
GRID TO PLATE	1.8		1.8	pf
INPUT: G TO (H + PK + TK + G3 + I.S.)	2.8		2.8	pf
OUTPUT: P TO (H + PK + TK + G3 + I.S.)	2.0		1.5	pf
CATHODE TO HEATER	3.0 A		3.0	pf
COUPLING				
PENTODE GRID 1 TO TRIODE PLATE	Max. .02		Max. .02	pf
PENTODE PLATE TO TRIODE PLATE	Max. .02		Max. 0.1	pf

A* SHIELD 315 CONNECTED TO PIN 6.

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HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

AVERAGE CHARACTERISTICS	6.3	VOLTS	400	MA.
HEATER-CATHODE VOLTAGE - TRIODE AND PENTODE SECTIONS				
HEATER NEGATIVE WITH RESPECT TO CATHODE				
TOTAL DC AND PEAK			200	VOLTS
HEATER POSITIVE WITH RESPECT TO CATHODE				
DC			100	VOLTS
TOTAL DC AND PEAK			200	VOLTS

MAXIMUM RATINGS

DESIGN MAXIMUM RATINGS - SEE EIA STANDARD RS-239

	TRIODE SECTION	PENTODE SECTION	
PLATE VOLTAGE	330	330	VOLTS
GRID 2 SUPPLY VOLTAGE		330	VOLTS
GRID 2 VOLTAGE		SEE RATING CHART	
POSITIVE DC GRID 1 VOLTAGE	0	0	VOLTS
PLATE DISSIPATION	2.5	3.0	WATTS
GRID 2 DISSIPATION		0.55	WATTS
GRID 1 CIRCUIT RESISTANCE			
FIXED BIAS		0.5	MEGOHM
SELF BIAS		1.0	MEGOHM

CHARACTERISTICS AND TYPICAL OPERATION

	TRIODE SECTION	PENTODE SECTION	
PLATE VOLTAGE	125	125	VOLTS
GRID 2 VOLTAGE		110	VOLTS
GRID 1 VOLTAGE	-1.0	-1.0	VOLTS
PLATE CURRENT	13.5	9.5	MA.
GRID 2 CURRENT		3.5	MA.
TRANSCONDUCTANCE	7,500	5,000	μ MHOS
AMPLIFICATION FACTOR	40		
PLATE RESISTANCE		Approx. 0.2	MEGOHM
E_{c1} FOR $I_b = 20 \mu A$	Approx. -9	Approx. -8	VOLTS
G_m AT $E_{c1} = 0 V$, $E_b = 100 V$, $E_{c2} = 70 V$.		5,500	μ MHOS