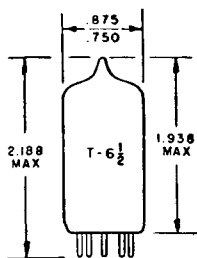


TUNG-SOL

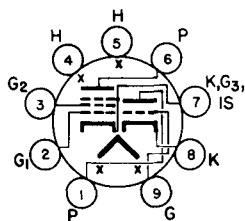
TRIODE-PENTODE

MINIATURE TYPE



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

FOR
FREQUENCY CHANGER
APPLICATIONS IN T.V. RECEIVERS
COATED UNIPOTENTIAL CATHODE
ANY MOUNTING POSITION



BOTTOM VIEW
BASING DIAGRAM
JEDEC 9 AE

THE 9A8 IS A TRIODE-PENTODE IN THE 9 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE AS A FREQUENCY CHANGER IN TELEVISION RECEIVERS.

DIRECT INTERELECTRODE CAPACITANCES

	TRIODE SECTION	PENTODE SECTION	
PLATE TO GRID 1		MAX. 0.025	pf
PLATE TO GRID	1.5		pf
INPUT	2.5	5.5	pf
OUTPUT	1.8	3.8	pf

HEATER CHARACTERISTICS AND RATINGS

AVERAGE CHARACTERISTICS	9.0 VOLTS	300	MA
LIMITS OF SUPPLIED CURRENT		300 ± 20	MA
HEATER-CATHODE VOLTAGE		100	VOLTS

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

MAXIMUM RATINGS

DESIGN CENTER VALUES - SEE EIA STANDARD RS-239

	TRIODE SECTION	PENTODE SECTION	
PLATE VOLTS	250	250	VOLTS
PLATE DISSIPATION	1.5	1.7	WATTS
GRID CIRCUIT RESISTANCE	0.5		MEGOHM
GRID 2 VOLTAGE AT $I_k = 14$ MA		175	VOLTS
GRID 2 VOLTAGE AT $I_k < 10$ MA		200	VOLTS
GRID 2 VOLTAGE WITHOUT CURRENT		550	VOLTS
GRID 2 DISSIPATION AT $P_p > 1.2$ WATTS		0.5	WATT
CATHODE CURRENT	14	14	MA.
GRID 1 CIRCUIT RESISTANCE-AUTOMATIC BIAS		1	MEGOHM
GRID 1 CIRCUIT RESISTANCE-FIXED BIAS		0.5	MEGOHM

TYPICAL CHARACTERISTICS

	TRIODE SECTION	PENTODE SECTION	
PLATE VOLTAGE	100	170	VOLTS
GRID 2 VOLTAGE		170	VOLTS
GRID 1 VOLTAGE	-2	-2	VOLTS
PLATE CURRENT	14	10	MA
GRID 2 CURRENT		2.8	MA
TRANSCONDUCTANCE	5,000	6,200	μ MHOS
TRIODE AMPLIFICATION FACTOR	20	47	
PLATE RESISTANCE		0.4	MEGOHM
INPUT RESISTANCE AT 50 Mc/s		10,000	OHMS
EQUIVALENT NOISE RESISTANCE		1,500	OHMS

OPERATING CHARACTERISTICS

FOR USE AS A MIXER

PLATE VOLTAGE	170	170	VOLTS
GRID 2 VOLTAGE	170	170	VOLTS
GRID 1 CIRCUIT RESISTANCE	0.1	0.1	MEGOHM
CATHODE RESISTOR	330	820	OHMS
OSCILLATOR VOLTAGE	3.5	3.5	VOLTS RMS
PLATE CURRENT	6.5	5.2	MA
GRID 2 CURRENT	2.0	1.5	MA
GRID 1 CURRENT	25	0	μ A
CONVERSION CONDUCTANCE	2,200	2,100	μ MHOS
PLATE RESISTANCE	0.8	0.87	MEGOHM

CONTINUED ON FOLLOWING PAGE

