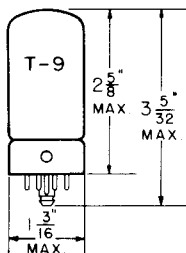


TUNG-SOL

PENTODE



GLASS BULB

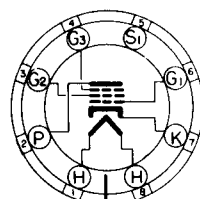
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 0.8 AMP.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

LOCK-IN
8 PIN BASE

8V

THE 7AK7 IS A SHARP CUT-OFF PENTODE USING THE LOCK-IN CONSTRUCTION. IT IS DESIGNED AND RATED FOR USE AS A GATING TUBE WITH AN ADDITIONAL CONTROL VOLTAGE ON THE SUPPRESSOR.

DIRECT INTERELECTRODE CAPACITANCES

EXTERNAL SHIELD #308 CONNECTED TO PIN #7

GRID TO PLATE: (G_1 TO P)	0.7	$\mu\mu\text{f}$
INPUT: G_1 TO (H+K+ G_2 + G_3 &1S)	12	$\mu\mu\text{f}$
OUTPUT: P TO (H+K+ G_2 + G_3 &1S)	9.5	$\mu\mu\text{f}$
GRID #3 TO PLATE: (G_3 TO P)	4	$\mu\mu\text{f}$

RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

HEATER VOLTAGE	6.3	VOLTS
MAXIMUM HEATER-CATHODE VOLTAGE	90	VOLTS
MAXIMUM PLATE VOLTAGE	200	VOLTS
MAXIMUM GRID #2 VOLTAGE	100	VOLTS
MAXIMUM PLATE DISSIPATION	8.5	WATTS
MAXIMUM GRID #2 DISSIPATION	2.5	WATTS
MAXIMUM POSITIVE DC GRID #1 VOLTAGE	50	VOLTS
MAXIMUM POSITIVE DC GRID #3 VOLTAGE	100	VOLTS
MAXIMUM NEGATIVE DC GRID #1 VOLTAGE	-100	VOLTS
MAXIMUM NEGATIVE DC GRID #3 VOLTAGE	-100	VOLTS

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER

HEATER VOLTAGE	6.3	6.3	6.3	VOLTS
HEATER CURRENT	0.8	0.8	0.8	AMP.
PLATE VOLTAGE	150	150	150	VOLTS
GRID #2 VOLTAGE	90	90	90	VOLTS
GRID #1 VOLTAGE	0	-11	0	VOLTS
GRID #3 VOLTAGE	0	0	-9.5	VOLTS
TRANSCONDUCTANCE	5 500	---	---	μMHOS
PLATE RESISTANCE (APPROX.)	11 500	---	---	OHMS
PLATE CURRENT (MAX.)	40	2.5 MAX.	2 MAX.	MA.
GRID #2 CURRENT (MAX.)	21	0.45	→60 MAX.	MA.
GRID #1 VOLTAGE (APPROX.) FOR $I_b = 10 \mu\text{A}$.	-17.5	---	---	VOLTS

UNDER GATING OPERATION THE MOMENTARY GRID #2 DISSIPATION MAY APPROXIMATE 4 WATTS PROVIDED THE DISSIPATION AVERAGED OVER ANY 1 SECOND INTERVAL DOES NOT EXCEED THE RATING FOR MAXIMUM GRID #2 DISSIPATION.

→ INDICATES A CHANGE.

7AK7

