TUNG-SOL

DETECTOR AMPLIFIER-PENTODE

ACORN TYPE

COATED UNIPOTENTIAL CATHODE [B]

HEATER

6.3 VOLTS [D] 0.15 AMPERE

AC OR DC

RATINGS

RF OR AF AMPLIFIER CLASS A

MAXIMUM PLATE VOLTAGE	250	VOLTS
MAXIMUM SCREEN (GRID 2) VOLTAGE	100	VOLTS
MAXIMUM SUPPRESSOR (GRID 3) VOLTAGE	100	VOLTS
MINIMUM CONTROL GRID VOLTAGE (GRID 1)	-3	VOLTS
MAXIMUM PLATE DISSIPATION	0.5	WATT
MAXIMUM SCREEN DISSIPATION	0.1	WATT

DIRECT INTERELECTRODE CAPACITANCES

CONTROL GRID TO CATHODE	3	μμf
PLATE TO CATHODE	3.4	μμf
GRID TO PLATE (WITH SHIELD BAFFLE)	0.007 (MAX.)	μμf

TYPICAL OPERATION AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

HEATER VOLTAGE	6.3	6.3	VOLTS
PLATE VOLTAGE	90	250	VOLTS
SCREEN VOLTAGE (GRID 2)	90	100	VOLTS
CONTROL GRID VOLTAGE (GRID 1)	-3	-3	VOLTS
AMPLIFICATION FACTOR	1100	> 2000	
PLATE RESISTANCE	1.0	> 1.5	MEGOHMS
MUTUAL CONDUCTANCE	1100	1400	μMHOS
PLATE CURRENT	1.2	2.0	MA.
SCREEN CURRENT	0.5	0.7	MA.

SUPPRESSOR CONNECTED TO CATHODE AT SOCKET (GRID 3)

RESISTANCE COUPLED A-F VOLTAGE AMPLIFIER

HEATER VOLTAGE	6.3	VOLTS
PLATE-SUPPLY VOLTAGE [A]	250	VOLTS
SCREEN VOLTAGE (GRID 2)	50	VOLTS
CONTROL GRID VOLTAGE (GRID 1) [C]	-2.1	VOLTS
LOAD RESISTANCE	0.25	MEGOHM
PLATE CURRENT	0.5	MA.
VOLTAGE OUTPUT (5% SECOND HAR.)	40 TO 50	VOLTS (RMS)
VOLTAGE AMPLIFICATION (APPROX.)	100	

SUPPRESSOR CONNECTED TO CATHODE AT SOCKET (GRID 3)

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TUNG-SOL

BIASED DETECTOR

HEATER VOLTAGE	6.3	VOLTS
PLATE-SUPPLY VOLTAGE	250	VOLTS
SCREEN VOLTAGE (GRID 2)	100	VOLTS
CONTROL GRID VOLTAGE (GRID 1) (APPROX.)	-6	VOLTS
LOAD RESISTANCE	0.25	MEGOHM
PLATE CURRENT	ADJUSTED TO 0.1 MA. WITH NO INPUT SIGNAL	
SELF-BIAS RESISTOR	20000 TO 50000	OHMS

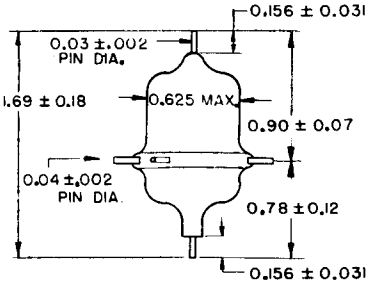
SUPPRESSOR CONNECTED TO CATHODE AT SOCKET (GRID 3)

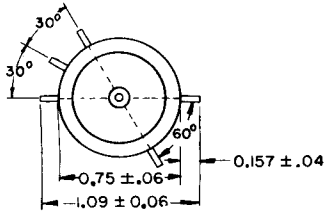
A THIS IS A PLATE-SUPPLY VOLTAGE VALUE. THE VOLTAGE EFFECTIVE AT THE PLATE WILL BE THE PLATE-SUPPLY VOLTAGE MINUS THE VOLTAGE DROP (IN THE LOAD RESISTOR) CAUSED BY THE PLATE CURRENT.

B IN CIRCUITS WHERE THE CATHODE IS NOT DIRECTLY CONNECTED TO THE HEATER, THE POTENTIAL DIFFERENCE BETWEEN HEATER AND CATHODE SHOULD BE KEPT AS LOW AS POSSIBLE. IF THE USE OF A LARGE RESISTOR BETWEEN HEATER AND CATHODE IS NECESSARY BECAUSE OF CIRCUIT CONSIDERATIONS, IT IS ESSENTIAL THAT THIS RESISTOR BE BY-PASSED BY A SUITABLE FILTER NETWORK OR OBJECTIONABLE HUM MAY DEVELOP.

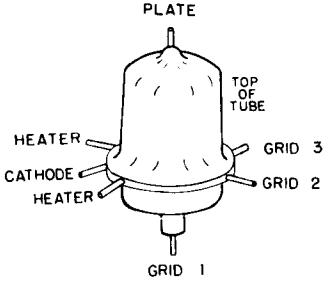
C THE D-C RESISTANCE IN THE GRID CIRCUIT SHOULD NOT EXCEED 1.0 MEGOHM.

D SHOULD NOT DEVIATE MORE THAN ± 10% FROM RATED VALUE.





ALL LINEAR DIMENSIONS ARE SPECIFIED IN INCHES



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PIN CONNECTIONS

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