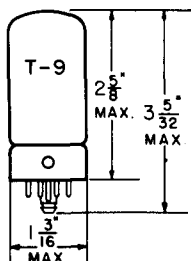


## TUNG-SOL

## DOUBLE TRIODE



GLASS BULB

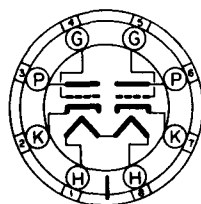
COATED UNIPOTENTIAL CATHODE

HEATER

6.3 VOLTS 600 MA.

AC OR DC

ANY MOUNTING POSITION



BOTTOM VIEW

LOCK-IN  
8 PIN BASE

8AC

THE 7N7 COMBINES TWO LOW-MU TRIODES IN THE LOCK-IN CONSTRUCTION. IT IS DESIGNED FOR USE EITHER AS A PHASE INVERTER OR AS A VOLTAGE AMPLIFIER.

## DIRECT INTERELECTRODE CAPACITANCES

WITH RMA SHIELD #308 CONNECTED TO CATHODE

|                            | TRIODE <sup>A</sup><br>UNIT I | TRIODE <sup>B</sup><br>UNIT II |    |
|----------------------------|-------------------------------|--------------------------------|----|
| GRID TO PLATE: (G TO P)    | 3                             | 3                              | μf |
| INPUT: G TO (H+K)          | 3.4                           | 2.9                            | μf |
| OUTPUT: P TO (H+K)         | 2                             | 2.4                            | μf |
| GRID TO GRID: (1G TO 2G)   |                               | 0.4                            | μf |
| PLATE TO PLATE: (1P TO 2P) |                               | 0.34                           | μf |
| GRID TO PLATE: (1G TO 2P)  |                               | 0.08                           | μf |
| GRID TO PLATE: (2G TO 1P)  |                               | 0.06                           | μf |

<sup>A</sup> TRIODE I - CONNECTED TO PINS 5, 6, AND 7.

<sup>B</sup> TRIODE II - CONNECTED TO PINS 2, 3, AND 4.

## RATINGS

INTERPRETED ACCORDING TO RMA STANDARD WB-210

|                                          |     |       |
|------------------------------------------|-----|-------|
| HEATER VOLTAGE                           | 6.3 | VOLTS |
| MAXIMUM HEATER-CATHODE VOLTAGE           | 90  | VOLTS |
| MAXIMUM PLATE VOLTAGE                    | 300 | VOLTS |
| MINIMUM GRID VOLTAGE                     | 0   | VOLTS |
| MAXIMUM PLATE DISSIPATION (EACH SECTION) | 2.5 | WATTS |

CONTINUED ON FOLLOWING PAGE

→ INDICATES A CHANGE OR ADDITION.

## TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS  $A_1$  AMPLIFIER

|                      |       |       |            |
|----------------------|-------|-------|------------|
| HEATER VOLTAGE       | 6.3   | 6.3   | VOLTS      |
| HEATER CURRENT       | 600   | 600   | MA.        |
| PLATE VOLTAGE        | 90    | 250   | VOLTS      |
| GRID VOLTAGE         | 0     | -8    | VOLTS      |
| SELF-BIAS RESISTOR   | 0     | 900   | OHMS       |
| PLATE CURRENT        | 10    | 9     | MA.        |
| PLATE RESISTANCE     | 6 700 | 7 700 | OHMS       |
| TRANSCONDUCTANCE     | 3 000 | 2 600 | $\mu$ MHOS |
| AMPLIFICATION FACTOR | 20    | 20    |            |

## PHASE INVERTER

|                              |        |        |       |
|------------------------------|--------|--------|-------|
| HEATER VOLTAGE               | 6.3    | 6.3    | VOLTS |
| HEATER CURRENT               | 600    | 600    | MA    |
| PLATE SUPPLY VOLTAGE         | 100    | 250    | VOLTS |
| GRID VOLTAGE                 | -2.25  | -5.5   | VOLTS |
| PLATE RESISTOR               | 30 000 | 50 000 | OHMS  |
| SELF-BIAS RESISTOR           | 750    | 1 150  | OHMS  |
| MAXIMUM OUTPUT VOLTAGE (RMS) | 20     | 65     | VOLTS |

→ INDICATES A CHANGE OR ADDITION.

