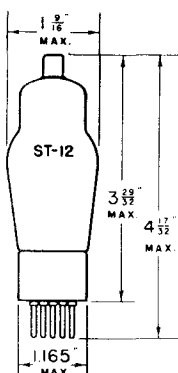


## TUNG-SOL



## PENTODE POWER AMPLIFIER

UNIPOTENTIAL CATHODE

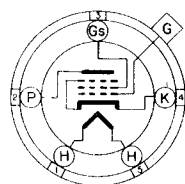
HEATER

6.3 VOLTS 0.3 AMPERE

AC OR DC

GLASS BULB

SMALL 5 PIN BASE



5 F

BOTTOM VIEW

THE TUNG-SOL 38 IS A PENTODE POWER AMPLIFIER DESIGNED FOR SERVICE IN THE OUTPUT STAGE OF AC OR STORAGE BATTERY OPERATED RECEIVERS.

## OPERATING CONDITIONS AND CHARACTERISTICS

## CLASS A AMPLIFIER

|                           |        |        |        |                     |          |
|---------------------------|--------|--------|--------|---------------------|----------|
| PLATE VOLTAGE             | 100    | 135    | 180    | 250 <sup>MAX.</sup> | VOLTS    |
| SCREEN VOLTAGE            | 100    | 135    | 180    | 250 <sup>MAX.</sup> | VOLTS    |
| CONTROL GRID VOLTAGE      | -9     | -13.5  | -18    | -25                 | VOLTS    |
| PLATE CURRENT             | 7      | 9      | 14     | 22                  | MA.      |
| SCREEN CURRENT            | 1.2    | 1.5    | 2.4    | 3.8                 | MA.      |
| PLATE RESISTANCE          | 0.14   | 0.13   | 0.11   | 0.10                | MEGOHM   |
| TRANSCONDUCTANCE          | 875    | 925    | 1050   | 1200                | μMHOS    |
| AMPLIFICATION FACTOR      | 120    | 120    | 120    | 120                 |          |
| LOAD RESISTANCE           | 15 000 | 13 500 | 11 600 | 10 000              | OHMS     |
| TOTAL HARMONIC DISTORTION | 8      | 10     | 8      | 8                   | PER CENT |
| POWER OUTPUT              | 0.27   | 0.55   | 1.0    | 2.5                 | WATTS    |

NOTE: THE POTENTIAL DIFFERENCE BETWEEN HEATER AND CATHODE SHOULD BE KEPT AS LOW AS POSSIBLE.

## DIRECT INTERELECTRODE CAPACITANCES

|                         |     |     |
|-------------------------|-----|-----|
| CONTROL GRID TO CATHODE | 3.5 | μμf |
| PLATE TO CATHODE        | 7.5 | μμf |
| CONTROL GRID TO PLATE   | 0.3 | μμf |

PLATE  
470-1

JUNE 26  
1939