

## TUNG-SOL

## TWIN TRIODE

MINIATURE TYPE

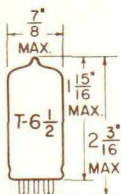
COATED UNIPOTENTIAL CATHODE

HEATER

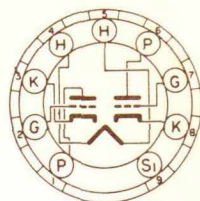
6.3 VOLTS 0.3 AMP

AC OR DC

ANY MOUNTING POSITION



GLASS BULB


 BOTTOM VIEW  
 SMALL-BUTTON  
 9-PIN NOVAL

90E

THE 6DT8 IS A GENERAL-PURPOSE HIGH-MU TWIN TRIODE OF THE 9-PIN MINIATURE TYPE INTENDED FOR USE AS AN RF AMPLIFIER AND AS A COMBINED OSCILLATOR-MIXER IN FM TUNERS. THIS TUBE IS ALSO USEFUL IN A WIDE VARIETY OF APPLICATIONS IN RADIO AND TELEVISION RECEIVERS.

 DIRECT INTERELECTRODE CAPACITANCES - APPROX.  
 WITH EXTERNAL SHIELD

|                                       | UNIT #1 | UNIT #2              |
|---------------------------------------|---------|----------------------|
| GRID-DRIVE OPERATION: <sup>A</sup>    |         |                      |
| GRID TO PLATE                         | 1.6     | 1.6 $\mu\mu\text{f}$ |
| GRID TO CATHODE, HEATER & I.S.        | 2.7     | 2.7 $\mu\mu\text{f}$ |
| PLATE TO CATHODE, HEATER & I.S.       | 1.6     | 1.6 $\mu\mu\text{f}$ |
| HEATER TO CATHODE                     | 3.0     | 3.0 $\mu\mu\text{f}$ |
| CATHODE-DRIVE OPERATION: <sup>B</sup> |         |                      |
| CATHODE TO GRID, HEATER, & I.S.       | ---     | 5.3 $\mu\mu\text{f}$ |
| PLATE TO GRID, HEATER, & I.S.         | ---     | 2.8 $\mu\mu\text{f}$ |

## RATINGS

INTERPRETED ACCORDING TO DESIGN CENTER SYSTEM

CLASS A<sub>1</sub> AMPLIFIER

EACH UNIT

|                                         |                  |        |
|-----------------------------------------|------------------|--------|
| HEATER VOLTAGE                          | 6.3              | VOLTS  |
| MAXIMUM PLATE VOLTAGE                   | 300              | VOLTS  |
| MAXIMUM GRID VOLTAGE:                   |                  |        |
| NEGATIVE BIAS VALUE                     | 50               | VOLTS  |
| MAXIMUM PLATE DISSIPATION               | 2.5              | WATTS  |
| MAXIMUM PEAK HEATER-CATHODE VOLTAGE:    |                  |        |
| HEATER NEGATIVE WITH RESPECT TO CATHODE | 200              | VOLTS  |
| HEATER POSITIVE WITH RESPECT TO CATHODE | 200 <sup>C</sup> | VOLTS  |
| MAXIMUM GRID-CIRCUIT RESISTANCE:        |                  |        |
| FOR FIXED-BIAS OPERATION                | 0.25             | MEGOHM |
| FOR CATHODE-BIAS OPERATION              | 1                | MEGOHM |

<sup>A</sup> WITH EXTERNAL SHIELD, #315 CONNECTED TO CATHODE OF UNIT UNDER TEST.

<sup>B</sup> WITH EXTERNAL SHIELD, #315, CONNECTED TO GRID OF UNIT UNDER TEST.

<sup>C</sup> DC COMPONENT MUST NOT EXCEED 100 VOLTS.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A<sub>1</sub> AMPLIFIER  
EACH UNIT

|                                                       |        |        |       |
|-------------------------------------------------------|--------|--------|-------|
| HEATER VOLTAGE                                        | 6.3    | 6.3    | VOLTS |
| HEATER CURRENT                                        | 0.3    | 0.3    | AMP.  |
| PLATE-SUPPLY VOLTAGE                                  | 100    | 250    | VOLTS |
| CATHODE-BIAS RESISTOR                                 | 270    | 200    | OHMS  |
| AMPLIFICATION FACTOR                                  | 60     | 60     |       |
| PLATE RESISTANCE (APPROX.)                            | 15 000 | 10 900 | OHMS  |
| TRANSCONDUCTANCE                                      | 4 000  | 5 500  | μMHOS |
| PLATE CURRENT                                         | 3.7    | 10     | MA.   |
| GRID VOLTAGE (APPROX.) FOR PLATE<br>CURRENT OF 10 μA. | -5     | -12    | VOLTS |

