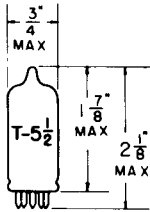


TUNG-SOL

TRIODE

MINIATURE TYPE



GLASS BULB

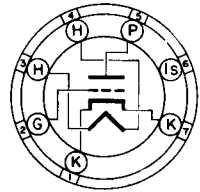
5-2

COATED UNIPOTENTIAL CATHODE

HEATER

6.3^B VOLTS 0.18^A AMP.

ANY MOUNTING POSITION



BOTTOM VIEW

MINIATURE BUTTON
7 PIN BASE

TFF

THE 6FQ5 IS A SEMI-REMOTE CUTOFF TRIODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE AS A VHF AND RF AMPLIFIER AT A B⁺ OF 135 VOLTS. EXCEPT FOR HEATER RATINGS AND HEATER WARM-UP TIME, THE 6FQ5 IS IDENTICAL TO THE 2FQ5 AND THE 3FQ5.

DIRECT INTERELECTRODE CAPACITANCES

WITH EXTERNAL SHIELD

| | | |
|------------------------------|-----|----|
| GRID TO PLATE | 0.4 | μf |
| INPUT: G TO (H+K+I.S.+E.S.) | 4.8 | μf |
| OUTPUT: P TO (H+K+I.S.+E.S.) | 4.0 | μf |
| HEATER TO CATHODE | 2.8 | μf |

RATINGS

INTERPRETED ACCORDING TO DESIGN MAXIMUM SYSTEM

| | | |
|---|---------|----------|
| HEATER VOLTAGE ^D | 6.3±0.6 | VOLTS |
| MAXIMUM PLATE VOLTAGE | 200 | VOLTS |
| MAXIMUM PLATE DISSIPATION | 2.5 | WATTS |
| MAXIMUM DC CATHODE CURRENT | 22 | MA. |
| MAXIMUM NEGATIVE GRID VOLTAGE | 50 | VOLTS |
| MAXIMUM GRID CIRCUIT RESISTANCE (SELF BIAS) | 1.0 | MEG OHMS |
| MAXIMUM HEATER-CATHODE VOLTAGE: | | |
| HEATER NEGATIVE WITH RESPECT TO CATHODE | | |
| TOTAL DC AND PEAK | 100 | VOLTS |
| HEATER POSITIVE WITH RESPECT TO CATHODE | | |
| TOTAL DC AND PEAK | 100 | VOLTS |

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A₁ AMPLIFIER

| | | |
|--|-------------------|-------|
| HEATER VOLTAGE ^D | 6.3±0.6 | VOLTS |
| HEATER CURRENT ^D | 0.18 ^A | AMP. |
| PLATE VOLTAGE | 135 | VOLTS |
| GRID VOLTAGE | -1.2 | VOLTS |
| PLATE CURRENT | 11.5 | MA. |
| TRANSCONDUCTANCE | 11 000 | μMHOS |
| AMPLIFICATION FACTOR | 60 | |
| PLATE RESISTANCE (APPROX.) | 5 500 | OHMS |
| EC FOR I _b = 100 μA (APPROX.) | -5 | VOLTS |

CONTINUED ON FOLLOWING PAGE

FORMING U. S. A.

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

NOTES

^ATHE BOGEY VALUE OF VOLTAGE/CURRENT PRECEDING THIS NOTE IS OBTAINED WHEN OPERATING THE HEATER WITH THE SPECIFIED VALUE OF CURRENT/VOLTAGE.

^BFOR SERIES/PARALLEL OPERATION OF HEATERS, EQUIPMENT SHOULD BE DESIGNED THAT AT NORMAL SUPPLY VOLTAGE BOGEY TUBES WILL OPERATE AT THIS VALUE OF HEATER/CURRENT VOLTAGE.

^CDESIGN-MAXIMUM RATINGS ARE LIMITING VALUES OF OPERATING AND ENVIRONMENTAL CONDITIONS APPLICABLE TO A BOGEY ELECTRON DEVICE OF A SPECIFIED TYPE AS DEFINED BY ITS PUBLISHED DATA, AND SHOULD NOT BE EXCEEDED UNDER THE WORST PROBABLE CONDITIONS. THE DEVICE MANUFACTURER CHOOSES THESE VALUES TO PROVIDE ACCEPTABLE SERVICEABILITY OF THE DEVICE, TAKING RESPONSIBILITY FOR THE EFFECTS OF CHANGES IN OPERATING CONDITIONS DUE TO VARIATIONS IN DEVICE CHARACTERISTICS. THE EQUIPMENT MANUFACTURER SHOULD DESIGN SO THAT INITIALLY AND THROUGHOUT LIFE NO DESIGN-MAXIMUM VALUE FOR THE INTENDED SERVICE IS EXCEEDED WITH A BOGEY DEVICE UNDER THE WORST PROBABLE OPERATING CONDITIONS WITH RESPECT TO SUPPLY-VOLTAGE VARIATION, EQUIPMENT COMPONENT VARIATION, EQUIPMENT CONTROL ADJUSTMENT, LOAD VARIATION, SIGNAL VARIATION, AND ENVIRONMENTAL CONDITIONS.

^DHEATER VOLTAGE SUPPLY VARIATIONS SHALL BE RESTRICTED TO MAINTAIN HEATER VOLTAGE/CURRENT WITHIN THE SPECIFIED TOLERANCE.

*HEATER WARM-UP TIME IS DEFINED AS THE TIME REQUIRED FOR THE VOLTAGE ACROSS THE HEATER TO REACH 80% OF ITS RATED VOLTAGE AFTER APPLYING 4 TIMES RATED HEATER VOLTAGE TO A CIRCUIT CONSISTING OF THE TUBE HEATER IN SERIES WITH A RESISTANCE OF VALUE 3 TIMES THE NOMINAL HEATER OPERATING RESISTANCE.