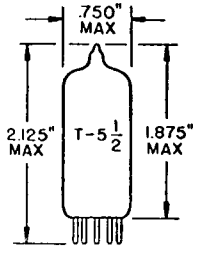
**TUNG-SOL**

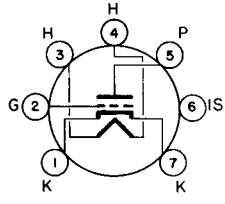
TRIODE

MINIATURE TYPE




GLASS BULB
MINIATURE BUTTON
7 PIN BASE E7-1
OUTLINE DRAWING
JEDEC 5-2

SHIELDED TRIODE
FOR
NEUTRODE CIRCUIT
APPLICATIONS




BOTTOM VIEW
JEDEC 7 FP

THE 2GK5 IS A FRAME GRID GAIN CONTROLLED SHIELDED TRIODE IN THE 7 PIN MINIATURE CONSTRUCTION. IT IS DESIGNED FOR USE AS A VHF RF AMPLIFIER AT A B+ OF 135 VOLTS.

## DIRECT INTERELECTRODE CAPACITANCES

WITH SHIELD

| | | |
|---|---|---|
| GRID TO PLATE | 0.52 | pf |
| INPUT: G TO ( H + K + I.S. + E.S. ) | 5.0 | pf |
| OUTPUT: P TO ( H + K + I.S. + E.S. ) | 3.5 | pf |
| HEATER TO CATHODE | 2.5 | pf |

## HEATER CHARACTERISTICS AND RATINGS

DESIGN MAXIMUM VALUES - SEE EIA STANDARD RS-239

| | | | |
|---|---|---|---|
| AVERAGE CHARACTERISTICS | 2.3 VOLTS | 600 | MA. |
| HEATER WARM-UP TIME | | 11 | SECONDS |
| LIMITS OF SUPPLIED CURRENT | 600 ± 40 | | MA. |
| 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 |

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

## MAXIMUM RATINGS

DESIGN MAXIMUM RATINGS - SEE EIA STANDARD RS-239

| | | |
|---|---|---|
| PLATE VOLTAGE | 200 | VOLTS |
| GRID VOLTAGE | -50 | VOLTS |
| PLATE DISSIPATION | 2.5 | WATTS |
| DC CATHODE CURRENT | 22 | MA. |
| GRID CIRCUIT RESISTANCE - SELF BIAS | 1.0 | MEGOHMS |

## CHARACTERISTICS AND TYPICAL OPERATION

CLASS A1 AMPLIFIER

| | | | |
|---|---|---|---|
| PLATE VOLTAGE | | 135 | VOLTS |
| GRID VOLTAGE | | -1.0 | VOLTS |
| PLATE CURRENT | | 11.5 | MA. |
| TRANSCONDUCTANCE | | 15,000 | μMHOS |
| AMPLIFICATION FACTOR | | 78 | |
| PLATE RESISTANCE | Approx. | 5,400 | OHMS |
| $E_c$ FOR $G_m$ = 150 μMHOS | Approx. | -4.2 | VOLTS |
| $E_c$ FOR $G_m$ = 1,500 μMHOS | Approx. | -2.5 | VOLTS |
| HOT INPUT RESISTANCE - 200 Mc/s - GROUNDED PLATE | | 275 | OHMS |
| HOT INPUT CAPACITANCE - 200 Mc/s - GROUNDED PLATE | | 11.2 | pf |
| NOISE FIGURE - 200 Mc/s - OPTIMIZED NEUTRALIZED TRIODE RF AMPLIFIER STAGE, NOISE MATCHED | | 4.7 | DB |