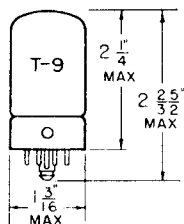


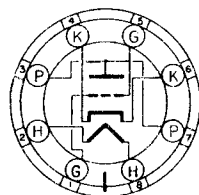
TUNG-SOL

TRIODE



GLASS BULB

UNIPOTENTIAL CATHODE
 HEATER
 6.3 VOLTS 150 MA.
 AC OR DC
 ANY MOUNTING POSITION



BOTTOM VIEW

LOCK-IN 8 PIN BASE

THE 7E5 IS A HEATER-CATHODE TYPE SHARP CUT-OFF VOLTAGE AMPLIFIER USING THE LOCK-IN CONSTRUCTION. IT IS CHARACTERIZED BY MODERATELY HIGH TRANSCONDUCTANCE AND RELATIVELY LOW INTERELECTRODE CAPACITANCES AND LOAD INDUCTANCE MAKING IT SUITABLE FOR HIGH FREQUENCY CIRCUITS. IN ADDITION IT IS ECONOMICAL OF HEATER POWER.

DIRECT INTERELECTRODE CAPACITANCES

WITH RMA SHIELD #308 CONNECTED TO CATHODE

| | | |
|-------------------------|-----|----------------|
| GRID TO PLATE: (G TO P) | 1.5 | μmf |
| INPUT: G TO (H+K) | 3.6 | μmf |
| OUTPUT: P TO (H+K) | 2.8 | μmf |

RATINGS

INTERPRETED ACCORDING TO RMA STANDARD M6-210

| | | |
|--------------------------------|-----|-------|
| HEATER VOLTAGE | 6.3 | VOLTS |
| MAXIMUM-HEATER-CATHODE VOLTAGE | 90 | VOLTS |
| MAXIMUM PLATE VOLTAGE | 250 | VOLTS |
| MAXIMUM PLATE CURRENT | 16 | MA. |
| MAXIMUM GRID CURRENT | 6 | MA. |
| MAXIMUM PLATE DISSIPATION | 4 | WATTS |

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

CLASS A_1 AMPLIFIER

| | | |
|----------------------|--------|------------------|
| HEATER VOLTAGE | 6.3 | VOLTS |
| HEATER CURRENT | 150 | MA. |
| PLATE CURRENT | 180 | VOLTS |
| GRID VOLTAGE | -3 | VOLTS |
| PLATE RESISTANCE | 12 000 | OHMS |
| TRANSCONDUCTANCE | 3 000 | μMHOS |
| AMPLIFICATION FACTOR | 36 | |
| PLATE CURRENT | 5.5 | MA. |

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

CONTINUED FROM PRECEDING PAGE

TYPICAL OPERATING CONDITIONS AND CHARACTERISTICS

UHF OSCILLATOR - 750 MEGACYCLE

HALF-WAVE FOUR-LINE OSCILLATOR IN WHICH THE LINE SHORTENING,
DUE TO THE TUBE, IS APPROXIMATELY 45% OF A HALF-WAVE LENGTH.

| | | | |
|----------------|--------|--------|-------|
| HEATER VOLTAGE | 6.3 | 6.3 | VOLTS |
| HEATER CURRENT | 150 | 150 | MA. |
| PLATE VOLTAGE | 200 | 250 | VOLTS |
| GRID RESISTOR | 10 000 | 20 000 | OHMS |
| DEVELOPED BIAS | 2.5 | 3.5 | VOLTS |
| PLATE CURRENT | 11 | 13 | MA. |

UHF OSCILLATOR OR POWER AMPLIFIER 300 MEGACYCLE

QUARTER WAVE FOUR-LINE OSCILLATOR IN WHICH THE LINE SHORTENING
IS APPROXIMATELY 30% OF A QUARTER WAVE LENGTH.

| | | |
|-----------------------------------|-------|-------|
| HEATER VOLTAGE | 6.3 | VOLTS |
| HEATER CURRENT | 150 | MA. |
| PLATE SUPPLY VOLTAGE ^A | 150 | VOLTS |
| GRID RESISTOR (APPROX.) | 1 700 | OHMS |
| PLATE CURRENT | 16 | MA. |
| GRID CURRENT | 6 | MA. |
| POWER OUTPUT | 0.2 | WATT |

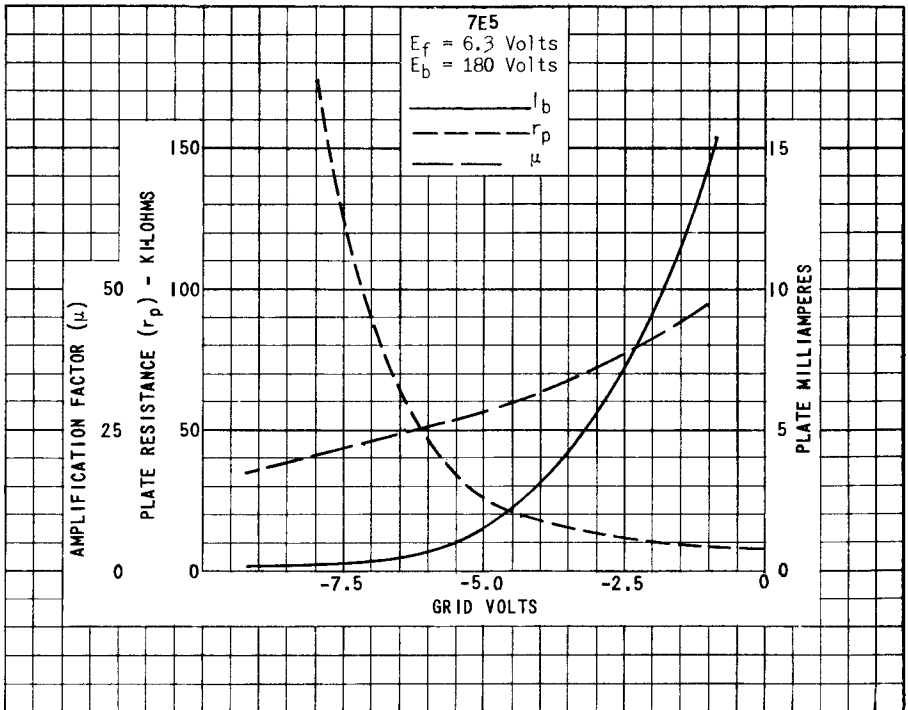
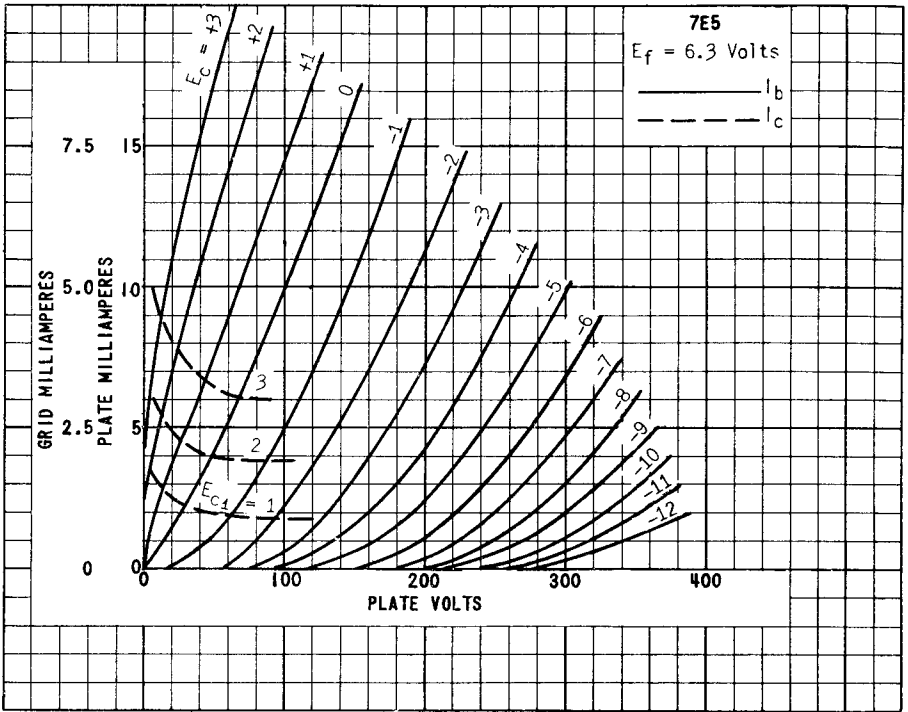
^ASUPPLIED THROUGH 3000 OHM DROPPING RESISTOR.

LOCAL OSCILLATOR FOR 300 MEGACYCLE MIXER DRIVING

QUARTER WAVE FOUR-LINE OSCILLATOR IN WHICH THE LINE SHORTENING
IS APPROXIMATELY 30% OF A QUARTER WAVE LENGTH.

| | | |
|-----------------------------------|-------|-------|
| HEATER VOLTAGE | 6.3 | VOLTS |
| HEATER CURRENT | 150 | MA. |
| PLATE SUPPLY VOLTAGE ^A | 90 | VOLTS |
| GRID VOLTAGE | -7 | VOLTS |
| GRID RESISTOR | 3 000 | OHMS |
| MIXER DEVELOPED BIAS | -5.3 | VOLTS |
| PLATE CURRENT | 7.8 | MA. |

^ASUPPLIED THROUGH 3000 OHM DROPPING RESISTOR



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