

ELECTRONIC TUBE REFERENCE

6P7G

Voltage - Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA  
2 SECTIONS  
CONSTRUCTION  
PENTODE-TRIODE

Combined triode-pentode for general amplification or receiving-equipment service.

GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | 7U                | BASE PINS            | 7             |
| NOMINAL HEATER      | 6.3 V / 300 mA    | PARALLEL HEATER      | – / –         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Dissimilar    |

SECTION RATINGS

|                                                                                                                                             |          |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------|
| SECTION1 Pentode                                                                                                                            |          |
| PLATE RESISTANCE                                                                                                                            | 850000 Ω |
| TRANSCONDUCTANCE                                                                                                                            | 0.0011 S |
| MAXIMUM PLATE VOLTAGE                                                                                                                       | 250 V    |
| MAXIMUM SCREEN VOLTAGE                                                                                                                      | 100 V    |
| Promoted from printed maximum-rating/characteristic columns; additional published operating points and capacitances retained as parameters. |          |

|                                                                                                                                             |          |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------|
| SECTION2 Triode                                                                                                                             |          |
| PLATE RESISTANCE                                                                                                                            | 16000 Ω  |
| TRANSCONDUCTANCE                                                                                                                            | 0.0005 S |
| AMPLIFICATION FACTOR                                                                                                                        | 8        |
| MAXIMUM PLATE VOLTAGE                                                                                                                       | 100 V    |
| Promoted from printed maximum-rating/characteristic columns; additional published operating points and capacitances retained as parameters. |          |

Combined pentode-triode receiving tube.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1937 Raytheon Radio Receiving Tubes

Published test conditions and operating points. Values on this page are preserved as reported by this source.

## 1937 RAYTHEON RADIO RECEIVING TUBES

## Section 1 · Pentode

| CAPACITANCE               |                 |                  |
|---------------------------|-----------------|------------------|
| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
| Grid-to-plate capacitance | 0.008 pF        | Pentode          |
| Input capacitance         | 3.5 pF          | Pentode          |
| Output capacitance        | 12 pF           | Pentode          |

| OTHER                         |                 |                  |
|-------------------------------|-----------------|------------------|
| PARAMETER                     | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage                 | 250 V           | ClassA           |
| Screen voltage                | 100 V           | ClassA           |
| Grid bias                     | -3 V            | ClassA           |
| Plate current                 | 6.5 mA          | ClassA           |
| Screen current                | 1.5 mA          | ClassA           |
| Oscillator peak voltage input | 7 V             | Converter        |

| CHARACTERISTIC         |                 |                  |
|------------------------|-----------------|------------------|
| PARAMETER              | PUBLISHED VALUE | CONDITION / NOTE |
| Plate resistance       | 850000 Ω        | Pentode          |
| Transconductance       | 1100 μS         | Pentode          |
| Conversion conductance | 200 μS          | Converter        |

## 1937 RAYTHEON RADIO RECEIVING TUBES

## Section 2 · Triode

| CAPACITANCE               |                 |                  |
|---------------------------|-----------------|------------------|
| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
| Grid-to-plate capacitance | 2 pF            | Triode           |

| PARAMETER          | PUBLISHED VALUE | CONDITION / NOTE |
|--------------------|-----------------|------------------|
| Input capacitance  | 3.5 pF          | Triode           |
| Output capacitance | 3 pF            | Triode           |

| OTHER         |                 |                  |
|---------------|-----------------|------------------|
| PARAMETER     | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage | 100 V           | ClassA           |
| Grid bias     | -3 V            | ClassA           |
| Plate current | 3.5 mA          | ClassA           |

| CHARACTERISTIC       |                 |                  |
|----------------------|-----------------|------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE |
| Plate resistance     | 16000 $\Omega$  | Triode           |
| Transconductance     | 500 $\mu$ S     | Triode           |
| Amplification factor | 8               | Triode           |



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 195X General Electric Essential Characteristics

Published test conditions and operating points. Values on this page are preserved as reported by this source.

## 195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

### Section 1 · Pentode

| OTHER                |                 |                  |
|----------------------|-----------------|------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage        | 250 V           | ClassA           |
| Screen voltage       | 100 V           | ClassA           |
| Control-grid voltage | -3 V            | ClassA           |
| Plate current        | 6.5 mA          | ClassA           |
| Screen current       | 1.5 mA          | ClassA           |

| CHARACTERISTIC   |                    |                  |
|------------------|--------------------|------------------|
| PARAMETER        | PUBLISHED VALUE    | CONDITION / NOTE |
| Plate resistance | 850000 $\Omega$    | ClassA           |
| Transconductance | 1100 $\mu\text{S}$ | ClassA           |

#### 195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

### Section 2 · Triode

| OTHER                |                 |                  |
|----------------------|-----------------|------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage        | 100 V           | ClassA           |
| Control-grid voltage | -3 V            | ClassA           |
| Plate current        | 3.5 mA          | ClassA           |

| CHARACTERISTIC       |                   |                  |
|----------------------|-------------------|------------------|
| PARAMETER            | PUBLISHED VALUE   | CONDITION / NOTE |
| Plate resistance     | 16000 $\Omega$    | ClassA           |
| Transconductance     | 500 $\mu\text{S}$ | ClassA           |
| Amplification factor | 8                 | ClassA           |

## TUBE TINKER

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