

ELECTRONIC TUBE REFERENCE

# 6T7G

Voltage - Triode (with diode, heptode or hexode) electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS  
CONSTRUCTION  
DIODE-DIODE-TRIODE

Double-diode triode combining radio detector and AVC rectification with subsequent voltage amplification. The paired diodes handle signal and control-voltage functions while the triode provides receiver audio or voltage gain.

## GENERAL CHARACTERISTICS

|                     |                |                      |               |
|---------------------|----------------|----------------------|---------------|
| BASE DESIGNATION    | 7V             | BASE PINS            | 7             |
| NOMINAL HEATER      | 6.3 V / 150 mA | PARALLEL HEATER      | – / –         |
| HEATING             | Indirect       | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Common cathode | SECTION CONSTRUCTION | Dissimilar    |

## SECTION RATINGS

|                                                     |           |
|-----------------------------------------------------|-----------|
| SECTION1 Diode                                      |           |
| No fixed ratings recorded.                          |           |
| Representative row for identical repeated sections. |           |
| SECTION2 Triode                                     |           |
| PLATE RESISTANCE                                    | 62000 Ω   |
| TRANSCONDUCTANCE                                    | 0.00106 S |
| AMPLIFICATION FACTOR                                | 65        |
| MAXIMUM PLATE VOLTAGE                               | 250 V     |
| High-mu triode section.                             |           |

### SECTION3 Diode

*No fixed ratings recorded.*

*Physical diode section added during approved section-structure reconciliation.*

High-mu double-diode triode for detector and voltage-amplifier service.

## 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 2 · Triode

| CAPACITANCE               |                 |                  |
|---------------------------|-----------------|------------------|
| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
| Grid-to-plate capacitance | 1.3 pF          | Section1         |
| Input capacitance         | 2.7 pF          | Section1         |
| Output capacitance        | 4.5 pF          | Section1         |

| OTHER         |                 |                  |
|---------------|-----------------|------------------|
| PARAMETER     | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage | 135 V           | ClassA           |
| Grid bias     | -1.5 V          | ClassA           |
| Plate current | 0.9 mA          | ClassA           |
| Plate voltage | 250 V           | ClassA           |
| Grid bias     | -3 V            | ClassA           |
| Plate current | 1.2 mA          | ClassA           |

| CHARACTERISTIC       |                 |                  |
|----------------------|-----------------|------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE |
| Plate resistance     | 65000 $\Omega$  | 135VPlate        |
| Transconductance     | 1000 $\mu$ S    | 135VPlate        |
| Amplification factor | 65              | Section1         |
| Plate resistance     | 62000 $\Omega$  | 250VPlate        |
| Transconductance     | 1050 $\mu$ S    | 250VPlate        |

# 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 2 · Triode

| CAPACITANCE            |                 |                  |
|------------------------|-----------------|------------------|
| PARAMETER              | PUBLISHED VALUE | CONDITION / NOTE |
| Input capacitance      | 1.8 pF          | —                |
| Output capacitance     | 3.1 pF          | —                |
| Grid-plate capacitance | 1.7 pF          | —                |

| OTHER         |                 |                  |
|---------------|-----------------|------------------|
| PARAMETER     | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage | 250 V           | ClassA           |
| Grid voltage  | -3 V            | ClassA           |
| Plate current | 1.2 mA          | ClassA           |

| CHARACTERISTICS      |                 |                  |
|----------------------|-----------------|------------------|
| PARAMETER            | PUBLISHED VALUE | CONDITION / NOTE |
| Plate resistance     | 62000 ohm       | ClassA           |
| Transconductance     | 1050 uS         | ClassA           |
| Amplification factor | 65              | ClassA           |

## TUBE TINKER

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