



## ELECTRONIC TUBE REFERENCE

6872

Voltage Pentode - Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

**1 SECTION**  
CONSTRUCTION  
**PENTODE**

Reliable semi-remote-cutoff pentode designed for controlled-gain RF or AGC amplifier service in severe airborne or guided-missile environments.

## GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | 7             |
| NOMINAL HEATER      | 6.3 V / 200 mA    | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Similar       |

## SECTION RATINGS

|                                                                                                                                                          |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| <b>SECTION 1</b> Pentode                                                                                                                                 |                 |
| PLATE RESISTANCE                                                                                                                                         | 340000 $\Omega$ |
| TRANSCONDUCTANCE                                                                                                                                         | 0.0041 S        |
| MAXIMUM PLATE VOLTAGE                                                                                                                                    | 165 V           |
| MAXIMUM SCREEN VOLTAGE                                                                                                                                   | 155 V           |
| MAXIMUM PLATE DISSIPATION                                                                                                                                | 1 W             |
| MAXIMUM SCREEN DISSIPATION                                                                                                                               | 0.4 W           |
| MAXIMUM CATHODE CURRENT                                                                                                                                  | 20 mA           |
| <i>Published maximum ratings and typical characteristics promoted from the approved source; identical repeated sections compressed where applicable.</i> |                 |

Reliable semi-remote-cutoff subminiature pentode for AGC amplifier service in mobile and airborne equipment. Electrical ratings, characteristics, operating data, and special environmental information were extracted from the supplied source.



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1938 Raytheon

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

1938 RAYTHEON

## Section 1 · Pentode

| OTHER                      |                 |                  |
|----------------------------|-----------------|------------------|
| PARAMETER                  | PUBLISHED VALUE | CONDITION / NOTE |
| HeaterVoltageNominal       | 6.3 V           | Nominal          |
| HeaterCurrentNominal       | 200 mA          | Nominal          |
| Maximum Plate Voltage      | 165 V           | —                |
| Maximum Screen Voltage     | 155 V           | —                |
| Maximum Plate Dissipation  | 1.1 W           | —                |
| Maximum Screen Dissipation | 0.4 W           | —                |
| Maximum Cathode Current    | 20 mA           | —                |

| CHARACTERISTIC   |                 |                  |
|------------------|-----------------|------------------|
| PARAMETER        | PUBLISHED VALUE | CONDITION / NOTE |
| Transconductance | 4100 $\mu$ S    | Typical          |
| Plate Resistance | 340000 ohm      | Typical          |



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1961 Tung Sol

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

1961 TUNG SOL

## Section 1 · Pentode

| OTHER          |                 |                  |
|----------------|-----------------|------------------|
| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE |
| Heater voltage | 6.3 V           | Nominal          |

| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE                           |
|----------------|-----------------|--------------------------------------------|
| Heater current | 200 mA          | Nominal                                    |
| Plate voltage  | 165 V           | Published operating table; OperatingPoint1 |
| Plate voltage  | 120 V           | Published operating table; OperatingPoint1 |

| CHARACTERISTIC   |                 |                                            |
|------------------|-----------------|--------------------------------------------|
| PARAMETER        | PUBLISHED VALUE | CONDITION / NOTE                           |
| Transconductance | 4100 uS         | Published operating table; OperatingPoint1 |


SOURCE DATA APPENDIX

#### SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1966 Tung Sol Electronic Tubes 4 of 4

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

#### 1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

### Section 1 · Pentode

| CHARACTERISTICS                               |                 |                                                                                                                     |
|-----------------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------|
| PARAMETER                                     | PUBLISHED VALUE | CONDITION / NOTE                                                                                                    |
| LIMITS OF APPLIED VOLTAGE – published value 1 | 6.3 V           | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| LIMITS OF APPLIED VOLTAGE – published value 2 | 0.6 V           | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| PLATE VOLTAGE                                 | 165 V           | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| GRID 1 VOLTAGE                                | -55 V           | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| GRID 2 VOLTAGE                                | 155 V           | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| GRID 3 VOLTAGE                                | 0 V             | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| PLATE DISSIPATION                             | 1.1 W           | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |

| PARAMETER                            | PUBLISHED VALUE   | CONDITION / NOTE                                                                                                    |
|--------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------|
| GRID 2 DISSIPATION                   | <b>0.4 W</b>      | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| CATHODE CURRENT                      | <b>16.5 mA</b>    | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| GRID 1 CIRCUIT RESISTANCE            | <b>1.2</b>        | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| TEMPERATURE AT HOTTEST POINT ON BULB | <b>1220 C</b>     | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| PLATE VOLTAGE                        | <b>120 V</b>      | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| GRID 1 VOLTAGE                       | <b>0 V</b>        | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| GRID 2 VOLTAGE                       | <b>120 V</b>      | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| CATHODE BIAS RESISTOR                | <b>200 ohm</b>    | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| PLATE CURRENT                        | <b>7.75 mA</b>    | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| GRID 2 CURRENT                       | <b>2.7 mA</b>     | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| TRANSCONDUCTANCE                     | <b>4100 uS</b>    | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| PLATE RESISTANCE                     | <b>0.34 ohm</b>   | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| ALTITUDE RATING                      | <b>60000 ft</b>   | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| Plate resistance                     | <b>340000 ohm</b> | Promoted section value from the supplied datasheet.                                                                 |
| Transconductance                     | <b>0.0041 A/V</b> | Promoted section value from the supplied datasheet.                                                                 |

| OTHER                           |                 |                                                                                                                     |
|---------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------|
| PARAMETER                       | PUBLISHED VALUE | CONDITION / NOTE                                                                                                    |
| MAXIMUM HEATER-CATHODE VOLTAGE: | <b>200 V</b>    | Published datasheet table value; multiple values on a source row represent separate limits or operating conditions. |
| Maximum plate voltage           | <b>165 V</b>    | Promoted section value from the supplied datasheet.                                                                 |
| Maximum screen voltage          | <b>155 V</b>    | Promoted section value from the supplied datasheet.                                                                 |
| Maximum plate dissipation       | <b>1.1 W</b>    | Promoted section value from the supplied datasheet.                                                                 |
| Maximum screen dissipation      | <b>0.4 W</b>    | Promoted section value from the supplied datasheet.                                                                 |