



## ELECTRONIC TUBE REFERENCE

## 6F31

Voltage Pentode - Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Variable-mu RF pentode for gain-controlled RF and IF amplification in conventional receiver and communications equipment.

## GENERAL CHARACTERISTICS

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

## SECTION RATINGS

|                                                                                      |                  |
|--------------------------------------------------------------------------------------|------------------|
| SECTION 1 Pentode                                                                    |                  |
| PLATE RESISTANCE                                                                     | 1000000 $\Omega$ |
| TRANSCONDUCTANCE                                                                     | 0.0044 S         |
| MAXIMUM PLATE VOLTAGE                                                                | 250 V            |
| MAXIMUM SCREEN VOLTAGE                                                               | 100 V            |
| MAXIMUM PLATE DISSIPATION                                                            | 3 W              |
| MAXIMUM SCREEN DISSIPATION                                                           | 0.6 W            |
| MAXIMUM CATHODE CURRENT                                                              | 11 mA            |
| <i>Electrical section mapped from published characteristics and maximum ratings.</i> |                  |

Variable-mu RF pentode for RF and IF amplification; source also designates 6F31.



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 195X Tesla

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

195X TESLA

## Section 1 · Pentode

| OTHER          |                 |                  |
|----------------|-----------------|------------------|
| PARAMETER      | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage  | 250 V           | —                |
| Screen voltage | 100 V           | —                |
| Plate current  | 11 mA           | —                |

| CHARACTERISTIC   |                 |                  |
|------------------|-----------------|------------------|
| PARAMETER        | PUBLISHED VALUE | CONDITION / NOTE |
| Transconductance | 4400 $\mu$ S    | —                |

| CAPACITANCE       |                 |                  |
|-------------------|-----------------|------------------|
| PARAMETER         | PUBLISHED VALUE | CONDITION / NOTE |
| Input capacitance | 5.5 pF          | —                |



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1969 Tesla Manual of Electronic Tubes

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

1969 TESLA MANUAL OF ELECTRONIC TUBES

## Section 1 · Pentode

| CHARACTERISTICS |                 |                         |
|-----------------|-----------------|-------------------------|
| PARAMETER       | PUBLISHED VALUE | CONDITION / NOTE        |
| Heater voltage  | 6.3 V           | Published nominal value |

| PARAMETER        | PUBLISHED VALUE | CONDITION / NOTE                   |
|------------------|-----------------|------------------------------------|
| Heater current   | 300 mA          | Published nominal value            |
| Transconductance | 4400 $\mu$ S    | Published operating characteristic |
| Transconductance | 4400 $\mu$ S    | Published nominal characteristic   |

| OTHER                     |                 |                          |
|---------------------------|-----------------|--------------------------|
| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE         |
| Maximum plate dissipation | 3 W             | Published maximum rating |