

ELECTRONIC TUBE REFERENCE

UAF41

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

DIODE-PENTODE

Series-heater diode variable-mu pentode for RF/IF amplification and signal detection. The pentode provides controlled gain for automatic gain control while the diode handles detector or control rectification.

GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | 8             |
| NOMINAL HEATER      | 12.6 V / 100 mA   | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Dissimilar    |

SECTION RATINGS

|                              |          |
|------------------------------|----------|
| SECTION1 Pentode             |          |
| PLATE RESISTANCE             | 900000 Ω |
| TRANSCONDUCTANCE             | 0.0018 S |
| MAXIMUM PLATE VOLTAGE        | 250 V    |
| MAXIMUM SCREEN VOLTAGE       | 250 V    |
| MAXIMUM PLATE DISSIPATION    | 2 W      |
| MAXIMUM SCREEN DISSIPATION   | 0.3 W    |
| MAXIMUM CATHODE CURRENT      | 10 mA    |
| Variable-mu pentode section. |          |

|                                |        |
|--------------------------------|--------|
| <b>SECTION2</b> Diode          |        |
| <b>MAXIMUM PLATE VOLTAGE</b>   | 350 V  |
| <b>MAXIMUM CATHODE CURRENT</b> | 0.8 mA |
| <i>Detector diode section.</i> |        |

Variable-mu diode-pentode for RF, IF, or AF amplifier service.



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1957 Philips Receiving and Amplifying Tubes

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

## 1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

## Section 1 · Pentode

| CHARACTERISTICS       |                 |                  |
|-----------------------|-----------------|------------------|
| PARAMETER             | PUBLISHED VALUE | CONDITION / NOTE |
| Cutoff characteristic | Variable-mu     | —                |

| APPLICATION |                        |                  |
|-------------|------------------------|------------------|
| PARAMETER   | PUBLISHED VALUE        | CONDITION / NOTE |
| Application | RF / IF / AF amplifier | —                |



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1963 Philips Electron Tubes Handbook V1

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

## 1963 PHILIPS ELECTRON TUBES HANDBOOK V1

## Section 1 · Pentode

| OTHER                 |                 |                  |
|-----------------------|-----------------|------------------|
| PARAMETER             | PUBLISHED VALUE | CONDITION / NOTE |
| Plate voltage         | 170 V           | RF/IF amplifier  |
| Screen voltage        | 85 V            | RF/IF amplifier  |
| Plate current         | 5 mA            | RF/IF amplifier  |
| Screen current        | 1.5 mA          | RF/IF amplifier  |
| Maximum plate voltage | 250 V           | —                |

| PARAMETER                 | PUBLISHED VALUE | CONDITION / NOTE |
|---------------------------|-----------------|------------------|
| Maximum screen voltage    | 250 V           | —                |
| Maximum plate dissipation | 2 W             | —                |

| CHARACTERISTIC   |                 |                  |
|------------------|-----------------|------------------|
| PARAMETER        | PUBLISHED VALUE | CONDITION / NOTE |
| Transconductance | 1800 $\mu$ S    | RF/IF amplifier  |
| Plate resistance | 0.9 Mohm        | RF/IF amplifier  |

1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 2 · Diode

| OTHER                         |                 |                  |
|-------------------------------|-----------------|------------------|
| PARAMETER                     | PUBLISHED VALUE | CONDITION / NOTE |
| Maximum inverse voltage       | 350 V           | —                |
| Maximum average diode current | 0.8 mA          | —                |
| Maximum peak diode current    | 5 mA            | —                |



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Pentode

| CHARACTERISTIC     |                 |                  |
|--------------------|-----------------|------------------|
| PARAMETER          | PUBLISHED VALUE | CONDITION / NOTE |
| Input capacitance  | 4 pF            | Pentode          |
| Output capacitance | 6.5 pF          | Pentode          |

| OTHER                    |                 |                  |
|--------------------------|-----------------|------------------|
| PARAMETER                | PUBLISHED VALUE | CONDITION / NOTE |
| Anode-grid capacitance   | 0.002 pF        | Pentode          |
| Typical transconductance | 1800 $\mu$ S    | RFIFAmplifier    |



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and their source documents.

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