



## ELECTRONIC TUBE REFERENCE

## UBF11

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-PENTODE

Series-heater diode-pentode combining receiver detection with high-resistance small-signal amplification. The pentode supplies receiver gain while diode sections provide detector or control-voltage rectification.

## GENERAL CHARACTERISTICS

|                     |                |                      |               |
|---------------------|----------------|----------------------|---------------|
| BASE DESIGNATION    | —              | BASE PINS            | 8             |
| NOMINAL HEATER      | 20 V / 100 mA  | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect       | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Common cathode | SECTION CONSTRUCTION | Dissimilar    |

## SECTION RATINGS

|                         |        |
|-------------------------|--------|
| SECTION1 Diode          |        |
| MAXIMUM PLATE VOLTAGE   | 200 V  |
| MAXIMUM CATHODE CURRENT | 0.8 mA |
| Diode 1.                |        |

|                         |        |
|-------------------------|--------|
| SECTION2 Diode          |        |
| MAXIMUM PLATE VOLTAGE   | 200 V  |
| MAXIMUM CATHODE CURRENT | 0.8 mA |
| Diode 2.                |        |

| SECTION3 Pentode                                                    |                  |
|---------------------------------------------------------------------|------------------|
| PLATE RESISTANCE                                                    | 1500000 $\Omega$ |
| TRANSCONDUCTANCE                                                    | 0.0018 S         |
| MAXIMUM PLATE VOLTAGE                                               | 250 V            |
| MAXIMUM SCREEN VOLTAGE                                              | 250 V            |
| MAXIMUM PLATE DISSIPATION                                           | 1.5 W            |
| MAXIMUM SCREEN DISSIPATION                                          | 0.3 W            |
| MAXIMUM CATHODE CURRENT                                             | 10 mA            |
| <i>Pentode section; maximum and characteristic values promoted.</i> |                  |

The UBF11 combines a controllable pentode with two diodes. It is specified for RF, IF and audio amplification, includes fixed- and sliding-screen regulation data, and provides diode sections for detection and control-voltage generation.



## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1953 RFT Rundfunk Technik

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

## 1953 RFT RUNDFUNK TECHNIK

## Section 2 · Diode

| OTHER                 |                 |                  |
|-----------------------|-----------------|------------------|
| PARAMETER             | PUBLISHED VALUE | CONDITION / NOTE |
| Peak diode voltage    | 200 V           | —                |
| Maximum diode current | 0.8 mA          | —                |

## 1953 RFT RUNDFUNK TECHNIK

## Section 3 · Pentode

| APPLICATION |                         |                  |
|-------------|-------------------------|------------------|
| PARAMETER   | PUBLISHED VALUE         | CONDITION / NOTE |
| Application | RF_IF_AF_Amplifier text | —                |



## SOURCE OPERATING CONDITIONS

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# 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 3 · Pentode

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

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



SOURCE DATA APPENDIX

## SOURCE OPERATING CONDITIONS

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# 1959 Telefunken

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

## 1959 TELEFUNKEN

### Section 3 · Pentode

| OTHER             |                 |                           |
|-------------------|-----------------|---------------------------|
| PARAMETER         | PUBLISHED VALUE | CONDITION / NOTE          |
| Plate voltage     | 200 V           | Pentode;ScreenVoltage=80V |
| Screen voltage    | 80 V            | Pentode                   |
| Control-grid bias | -2 V            | Pentode                   |
| Plate current     | 6 mA            | Pentode                   |
| Screen current    | 2 mA            | Pentode                   |

| CHARACTERISTICS          |                 |                       |
|--------------------------|-----------------|-----------------------|
| PARAMETER                | PUBLISHED VALUE | CONDITION / NOTE      |
| Reduced transconductance | 18 uS           | RegulationRatio=100:1 |

| CAPACITANCE            |                 |                  |
|------------------------|-----------------|------------------|
| PARAMETER              | PUBLISHED VALUE | CONDITION / NOTE |
| Input capacitance      | 7.5 pF          | Pentode          |
| Grid-plate capacitance | <0.003 pF       | Pentode          |

## TUBE TINKER

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and their source documents.

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