

ELECTRONIC TUBE REFERENCE

CBL6

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA  
3 SECTIONS  
CONSTRUCTION  
DIODE-DIODE-PENTODE

Philips double-diode output-pentode combination tube. Two detector/control diodes share the envelope with a power pentode, integrating receiver detection functions and audio output.

GENERAL CHARACTERISTICS

|                     |                   |                      |               |
|---------------------|-------------------|----------------------|---------------|
| BASE DESIGNATION    | —                 | BASE PINS            | —             |
| NOMINAL HEATER      | 44 V / 200 mA     | PARALLEL HEATER      | — / —         |
| HEATING             | Indirect          | SERIES OPERATION     | Not specified |
| CATHODE ARRANGEMENT | Separate cathodes | SECTION CONSTRUCTION | Dissimilar    |

SECTION RATINGS

|                             |        |
|-----------------------------|--------|
| SECTION1 Diode              |        |
| PEAK INVERSE VOLTAGE        | 200 V  |
| NOMINAL OUTPUT CURRENT      | 0.8 mA |
| Double-diode output pentode |        |

|                             |          |
|-----------------------------|----------|
| SECTION2 Pentode            |          |
| PLATE RESISTANCE            | 37000 Ω  |
| TRANSCONDUCTANCE            | 0.0062 S |
| MAXIMUM PLATE VOLTAGE       | 250 V    |
| MAXIMUM SCREEN VOLTAGE      | 125 V    |
| MAXIMUM PLATE DISSIPATION   | 9 W      |
| Double-diode output pentode |          |

### SECTION3 Diode

*No fixed ratings recorded.*

*Second physical diode section; added to complete Diode + Pentode + Diode structure and align with SectionCount 3.*

CBL6 is a double-diode output pentode. The supplied Philips datasheet was read for heater data, operating characteristics, limiting ratings, and section-level electrical information.

## SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

# 1999 Philips 0-D

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

1999 PHILIPS 0-D

## Section 2 · Pentode

| OTHER                  |                 |                  |
|------------------------|-----------------|------------------|
| PARAMETER              | PUBLISHED VALUE | CONDITION / NOTE |
| Typical plate current  | 40 mA           | Va=200V          |
| Typical screen current | 9 mA            | Vg2=100V         |
| Output power           | 3.8 W           | ClassA           |