



ELECTRONIC TUBE REFERENCE

CBL1

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-PENTODE

Combined tube containing an output pentode and two detector diodes for AC/DC receiver service. It integrates radio detection and control functions with several watts of audio power 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	
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM CATHODE CURRENT	0.8 mA
PEAK INVERSE VOLTAGE	200 V
NOMINAL OUTPUT CURRENT	0.8 mA
<i>Published operating point, characteristic values and capacitance column reviewed.</i>	

SECTION2 Diode	
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM CATHODE CURRENT	0.8 mA
<i>Published operating point, characteristic values and capacitance column reviewed.</i>	

SECTION3 Pentode	
PLATE RESISTANCE	35000 Ω
TRANSCONDUCTANCE	0.008 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	9 W
MAXIMUM SCREEN DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	70 mA
<i>Published operating point, characteristic values and capacitance column reviewed.</i>	

Combined valve containing an output pentode and two detector diodes, intended for AC/DC receiver service and capable of several watts of audio output under the published operating conditions.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 Philips Miniwatt Vacuum Tube Catalog

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

1938 PHILIPS MINIWATT VACUUM TUBE CATALOG

Section 3 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	Published table operating point
Plate current	45 mA	Published table operating point
Control-grid bias	8.5 V	Published table operating point
Screen voltage	200 V	Published table operating point
Screen current	6 mA	Published table operating point
Optimum load resistance	4500 ohm	Published table operating point
Power output	5 W	Published table operating point
Maximum plate dissipation	9 W	Published table rating

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	8000000 μ S	Published table characteristic
Plate resistance	35000 ohm	Published table characteristic
Heater/filament voltage	44 V	Published heater/filament rating
Heater/filament current	200 mA	Published heater/filament rating



1963 Mullard

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

1963 MULLARD

Section 1 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Diode anode voltage maximum	200 V	—
Diode anode current maximum	0.8 mA	—
Diode grid-current test voltage maximum	-1.3 V	At Id=+0.3 uA

1963 MULLARD

Section 2 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Diode anode voltage maximum	200 V	—
Diode anode current maximum	0.8 mA	—
Diode grid-current test voltage maximum	-1.3 V	At Id=+0.3 uA

1963 MULLARD

Section 3 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage	200 V	—
Screen voltage	200 V	—
Output power	4 W	—
Anode supply voltage maximum	400 V	—
Heater-cathode voltage maximum	125 V	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

