



ELECTRONIC TUBE REFERENCE

EBL21

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-PENTODE

Combination valve incorporating a power-output pentode with diode or triode sections for audio-frequency amplification, detection, or driver service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	LOCTAL 8-P	BASE PINS	8
NOMINAL HEATER	6.3 V / 900 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.009 S
AMPLIFICATION FACTOR	23
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	11 W
MAXIMUM SCREEN DISSIPATION	2.75 W
MAXIMUM CATHODE CURRENT	60 mA
Output pentode section; published Class A and AB operating data.	

SECTION2 Diode	
PEAK INVERSE VOLTAGE	350 V
NOMINAL OUTPUT CURRENT	0.8 mA
PEAK FORWARD CURRENT	0.8 mA
<i>Detector diode I.</i>	

SECTION3 Diode	
PEAK FORWARD CURRENT	0.8 mA
<i>Detector diode II.</i>	

Double-diode output pentode for Class A audio power-amplifier service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1951 Mullard Valve and Service Manual

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

1951 MULLARD VALVE AND SERVICE MANUAL

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
Plate Current	36 mA	ClassA

1951 MULLARD VALVE AND SERVICE MANUAL

Section 2 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	800 mA	—

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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode capacitances	Published	See source sheet for electrode-specific capacitance values

195X TESLA

Section 2 · Diode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode capacitances	Published	See source sheet for electrode-specific capacitance values

195X TESLA

Section 3 · Diode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Interelectrode capacitances	Published	See source sheet for electrode-specific capacitance values



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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	800 mA	—
Transconductance	9000 uS	—
Plate resistance	50000 ohm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Screen voltage	250 V	ClassA
Plate current	36 mA	ClassA
Screen current	4.5 mA	ClassA
Load resistance	7000 ohm	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output power	4.5 W	ClassA
Maximum plate dissipation	11 W	—
Push-pull plate voltage	300 V	ClassAB;PushPull;TwoTubes
Push-pull output power	13.2 W	ClassAB;PushPull;TwoTubes

1999 PHILIPS E-Z

Section 2 · Diode

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