



ELECTRONIC TUBE REFERENCE

UBL21

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-PENTODE

Twin-diode/high-sensitivity power-pentode combination for detector and audio output in AC/DC receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	55 V / 100 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	25000 Ω
TRANSCONDUCTANCE	0.008 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	9 W
MAXIMUM SCREEN DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	75 mA
<i>Published ratings and characteristics promoted from the approved source.</i>	

SECTION2 Diode	
<i>No fixed ratings recorded.</i>	
<i>Representative section for two diode systems sharing the common cathode.</i>	

SECTION3 Diode

No fixed ratings recorded.

High-sensitivity output pentode combined with twin diodes for DC/AC mains-operated receivers.

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	180 V	ClassA,PentodeSection
Plate Current	61 mA	ClassA,PentodeSection
Screen Voltage	180 V	ClassA,PentodeSection
Power Output	4.5 W	ClassA,PentodeSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	9000 μ S	PentodeSection

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

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Audio output	—

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Signal detection	—



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	55 mA	Plate 200 V; Screen 200 V; Grid -13 V

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Load Resistance	3500 ohm	ClassA;OneTube;Plate 200 V;Screen 200 V



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1967 Mullard Receiving Tubes for Maintenance

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

1967 MULLARD RECEIVING TUBES FOR MAINTENANCE

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
I. 32.5 61	55 mA	Published in approved UBL21.pdf target datasheet; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ig2 5.5 10	9.5 mA	Published in approved UBL21.pdf target datasheet; Section1
gm 7.5 9.0	8 mA	Published in approved UBL21.pdf target datasheet; Section1
Vln(r.m.s.) (Pout=	50 mW	Published in approved UBL21.pdf target datasheet; Section1
Ik max	75 mA	Published in approved UBL21.pdf target datasheet; Section1
B	8 G	Published in approved UBL21.pdf target datasheet; Section1

1967 MULLARD RECEIVING TUBES FOR MAINTENANCE

Section 2 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
I. 32.5 61	55 mA	Published in approved UBL21.pdf target datasheet; Section2
Ig2 5.5 10	9.5 mA	Published in approved UBL21.pdf target datasheet; Section2
gm 7.5 9.0	8 mA	Published in approved UBL21.pdf target datasheet; Section2
Vln(r.m.s.) (Pout=	50 mW	Published in approved UBL21.pdf target datasheet; Section2
Ik max	75 mA	Published in approved UBL21.pdf target datasheet; Section2
B	8 G	Published in approved UBL21.pdf target datasheet; Section2



TUBE TINKER
ELECTRON TUBE DATABASE

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	55 V	SeriesHeater