



ELECTRONIC TUBE REFERENCE

EL31

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

25 W output pentode for high-power push-pull audio amplifiers and power-triode driver stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	Octal	BASE PINS	8
NOMINAL HEATER	6.3 V / 1.4 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	20000 Ω
TRANSCONDUCTANCE	0.014 S
AMPLIFICATION FACTOR	16.5
MAXIMUM PLATE VOLTAGE	800 V
MAXIMUM SCREEN VOLTAGE	400 V
MAXIMUM PLATE DISSIPATION	25 W
MAXIMUM SCREEN DISSIPATION	8 W
MAXIMUM CATHODE CURRENT	200 mA
<i>rp/gm promoted from published 275 V point; maximum ratings from limiting-values table.</i>	

25-watt output pentode for high-power audio amplifiers, especially push-pull stages. Published heater, characteristics, ratings and application information were read from the supplied Mullard sheet.



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

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Service	Audio power output	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Mullard Receiving Tubes

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

1958 MULLARD RECEIVING TUBES

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	275 V	Point1
Screen-grid voltage	275 V	Point1
Plate current	91 mA	Point1
Transconductance	14000 μ S	Point1
Plate resistance	20 k Ω m	Point1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output power	84 W	ClassAB;PushPull;TwoTubes;FixedBias;Va=600V
Output power	120 W	ClassAB;PushPull;TwoTubes;FixedBias;Va=800V

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Mullard

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

1963 MULLARD

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode current	42 mA	Va=600V; Vg2=400V
Screen current	5 mA	Va=600V; Vg2=400V

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output power	25 W	SingleValve; Va=275V; Vg2=275V

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker