

ELECTRONIC TUBE REFERENCE

E80L

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Special-quality long-life power/output pentode designed for stable professional, industrial, or wideband amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	NOVAL	BASE PINS	9
NOMINAL HEATER	6.3 V / 750 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	9000 Ω
TRANSCONDUCTANCE	0.009 S
AMPLIFICATION FACTOR	21
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	8 W
MAXIMUM SCREEN DISSIPATION	2.6 W
MAXIMUM GRID DISSIPATION	0.1 W
MAXIMUM CATHODE CURRENT	50 mA
Special-quality long-life shock- and vibration-resistant output pentode.	

E80L is listed in the supplied Amperex material as a premium-quality power pentode. Published ratings and characteristics were captured from the supplied table.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1955 Lorenz

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

1955 LORENZ

Section 1 · Pentode

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ruggedized construction	TRUE	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Amperex Industrial

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

1958 AMPEREX INDUSTRIAL

Section 1 · Pentode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published table
Plate voltage	250 V	Published table
Screen voltage	250 V	Published table
Plate current	50 mA	Published table
Power output	21 W	Published table

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	9000 ohm	Published table
Heater/filament voltage	6.3 V	Published rating
Heater/filament current	750 mA	Published rating



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

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Industrial output amplifier	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Amperex Condensed

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

1963 AMPEREX CONDENSED

Section 1 · Pentode

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published rating
Heater current	750 mA	Published rating
Published characteristic value	11	PremiumQuality
Published characteristic value 2	7	PremiumQuality

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	PremiumQuality
Plate current	50 mA	PremiumQuality

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V1a

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1A

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	204.5 V	ClassA
Screen supply voltage	204.5 V	ClassA
Cathode resistor	130 ohm	ClassA
Plate voltage	200 V	ClassA
Load resistance	7 kOhm	ClassA
Power output	2.7 W	ClassA
Plate voltage	200 V	ClassAB; PushPull; TwoTubes
Plate voltage	250 V	ClassAB; PushPull; TwoTubes

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	26.5–33.5 mA	ClassA
Screen current	2.7–5.5 mA	ClassA
Transconductance	7400–10600 uS	ClassA

1963 Philips Electron Tubes Handbook V3

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V3

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published heater rating
Heater current	750 mA	Published heater rating

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	Life-test characteristic point
Plate current	30 mA	Life-test characteristic point
Screen current	4.1 mA	Life-test characteristic point

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	11 pF	Published
Plate capacitance	7 pF	Published



SOURCE DATA APPENDIX

1963 Siemens

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

1963 SIEMENS

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	200 V	PentodeConnection
Typical Screen Voltage	200 V	PentodeConnection

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Current	30 mA	PentodeConnection



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published datasheet value
Heater voltage	6 V	Published datasheet value
Heater current	700 mA	Published datasheet value
Heater current	735 mA	Published datasheet value
Output power	2.7 W	Published datasheet value
Output power	2 W	Published datasheet value
Output power	5.7 W	Published datasheet value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode current	30 mA	Published datasheet value
Anode current	0.2 mA	Published datasheet value
Anode current	24 mA	Published datasheet value
Anode current	24.6 mA	Published datasheet value
Anode current	29.5 mA	Published datasheet value
Anode voltage	200 V	Published datasheet value
Anode voltage	600 V	Published datasheet value
Anode voltage	250 V	Published datasheet value
Screen-grid voltage	200 V	Published datasheet value
Screen-grid voltage	600 V	Published datasheet value
Screen-grid voltage	250 V	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output power one tube	2.7 W	Published datasheet value
Output power two tubes ClassAB	5.7 W	Published datasheet value

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