



ELECTRONIC TUBE REFERENCE

21A6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

PL81/21A6 beam-power pentode designed for television horizontal line-output and deflection service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9AS	BASE PINS	9
NOMINAL HEATER	21 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
TRANSCONDUCTANCE	0.0065 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	8 W
MAXIMUM SCREEN DISSIPATION	4.5 W
MAXIMUM CATHODE CURRENT	150 mA
<i>Beam-power amplifier intended for television horizontal-deflection service.</i>	

Explicit 21A6 co-designation on the PL81/21A6 television line-output pentode sheet.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Brimar Radio Valve No 7

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

1958 BRIMAR RADIO VALVE NO 7

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Positive Plate Pulse Voltage	7000 V	LineFlyback

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Television line time-base output	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	180 V	HorizontalDeflection; OperatingPoint1
Screen voltage	180 V	HorizontalDeflection; OperatingPoint1
Control-grid bias	23 V	HorizontalDeflection; OperatingPoint1
Plate current	45 mA	HorizontalDeflection; OperatingPoint1
Screen current	3 mA	HorizontalDeflection; OperatingPoint1
Plate voltage	180 V	HorizontalDeflection; OperatingPoint2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen voltage	180 V	HorizontalDeflection; OperatingPoint2
Control-grid bias	0 V	HorizontalDeflection; OperatingPoint2
Plate current	430 mA	HorizontalDeflection; OperatingPoint2
Screen current	29 mA	HorizontalDeflection; OperatingPoint2
Maximum positive pulse plate voltage	7000 V	HorizontalDeflection; PulseRated
Maximum plate dissipation	8 W	HorizontalDeflection
Maximum screen dissipation	4.5 W	HorizontalDeflection
Maximum DC cathode current	150 mA	HorizontalDeflection
Maximum plate voltage	250 V	—
Maximum screen voltage	250 V	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	6500 μ S	HorizontalDeflection; OperatingPoint1



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Ferranti Technical Handbook

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

1961 FERRANTI TECHNICAL HANDBOOK

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	21 V	—
HeaterOrFilamentCurrent	300 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PeakAnodeVoltage	7000 V	FrameTimeBase

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