



ELECTRONIC TUBE REFERENCE

1S5

Voltage - Pentode or Tetrode (under 100V) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

DIODE-PENTODE

Directly heated diode-pentode combining radio detection with audio-frequency voltage amplification in battery receivers. The diode recovers the signal while the sharp-cutoff pentode supplies subsequent audio gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6AU	BASE PINS	7
NOMINAL HEATER	1.4 V / 50 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

6AU - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 1G3	A	G3 – Suppressor Grid	CONNECTED
PIN1 – F	–	F – Filament	CONNECTED
PIN3 – 2P	B	P – Plate (Anode)	CONNECTED
PIN4 – 1G2	A	G2 – Screen Grid	CONNECTED
PIN5 – 1P	A	P – Plate (Anode)	CONNECTED
PIN6 – 1G1	A	G1 – Control Grid	CONNECTED
PIN7 – F	–	F – Filament	CONNECTED

SECTION RATINGS

SECTION1 Diode	
MAXIMUM CATHODE CURRENT	0.25 mA
Diode section; source publishes limited separate diode ratings/characteristics.	

SECTION2 Pentode	
PLATE RESISTANCE	600000 Ω
TRANSCONDUCTANCE	0.000625 S
MAXIMUM PLATE VOLTAGE	90 V
MAXIMUM SCREEN VOLTAGE	90 V
MAXIMUM CATHODE CURRENT	3 mA
<i>Detector diode and sharp-cutoff pentode for battery receiver signal amplification.</i>	

Directly heated diode-pentode combining a detector diode with an audio-frequency preamplifier pentode for battery receivers.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1948 Brimar Radio Valve Manual

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

1948 BRIMAR RADIO VALVE MANUAL

Section 1 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	1.4 V	—
HeaterOrFilamentCurrent	50 mA	—

1948 BRIMAR RADIO VALVE MANUAL

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage Gain	50	SupplyVoltage=90V

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 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	67.5 V	PentodeSection
Plate Current	1.6 mA	PentodeSection
Screen Voltage	67.5 V	PentodeSection
Screen Current	0.4 mA	PentodeSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	625 μ S	PentodeSection
Plate Resistance	600000 ohm	PentodeSection



SOURCE DATA APPENDIX

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 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	67.5 V	ClassA; OperatingPoint1
Screen voltage	67.5 V	ClassA; OperatingPoint1
Control-grid bias	0 V	ClassA; OperatingPoint1
Plate current	1.6 mA	ClassA; OperatingPoint1
Screen current	0.4 mA	ClassA; 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 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	1.4 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentCurrent	50 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Detector and AVC diode	Section2
Peak inverse voltage maximum	90 V	DetectorDiode
Average diode current maximum	0.2 mA	DetectorDiode

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	90 V	AudioAmplifier
Screen voltage	67.5 V	AudioAmplifier
Plate current	0.3 mA	AudioAmplifier
Screen current	0.1 mA	AudioAmplifier
Application	Resistance-coupled AF amplifier	Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	2 MΩ	Section1



1968 General Electric Co

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1968 GENERAL ELECTRIC CO

Section 1 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average diode current at 10 V DC	1.5 mA	—

1968 GENERAL ELECTRIC CO

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	67.5 V	ClassA
Screen voltage	67.5 V	ClassA
Plate current	1.6 mA	ClassA
Screen current	0.4 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	600000 ohm	ClassA
Transconductance	625 uS	ClassA



SOURCE DATA APPENDIX

1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Diode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	1.4 V	Published nominal value
Heater or filament current	50 mA	Published nominal value
Transconductance	625 μ S	Pentode section

1968 MAZDA BELVU

Section 2 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	1.4 V	Published nominal value
Heater or filament current	50 mA	Published nominal value
Transconductance	625 μ S	Published operating characteristic

TUBE TINKER

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and their source documents.

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