

ELECTRONIC TUBE REFERENCE

3C4

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

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Low-voltage directly heated power pentode designed for Class-A audio output. Its filamentary cathode and modest supply requirements suit battery-operated low-frequency power amplifiers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6BX	BASE PINS	6
NOMINAL HEATER	1.4 V / 50 mA	PARALLEL HEATER	1.4 V / 50 mA
HEATING	Direct	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

6BX - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – F	–	F – Filament	CONNECTED
PIN2 – P	A	P – Plate (Anode)	CONNECTED
PIN3 – G2	A	G2 – Screen Grid	CONNECTED
PIN4 – IC	–	–	IC
PIN5 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN5 – FCT	–	FCT – Filament Center Tap	CONNECTED
PIN6 – G1	A	G1 – Control Grid	CONNECTED
PIN7 – F	–	F – Filament	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.0014 S
MAXIMUM PLATE VOLTAGE	90 V
MAXIMUM SCREEN VOLTAGE	90 V
MAXIMUM PLATE DISSIPATION	0.6 W
MAXIMUM SCREEN DISSIPATION	0.2 W
<i>Low-voltage directly heated power pentode for Class A audio output.</i>	

Low-voltage directly heated power pentode for Class A audio 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	85 V	ClassA;ParallelFilaments
Screen-grid voltage	85 V	ClassA;ParallelFilaments
Grid No.1 bias	5.2 V	ClassA;ParallelFilaments
Plate current	5 mA	ClassA;ParallelFilaments
Screen-grid current	1.1 mA	ClassA;ParallelFilaments
Plate resistance	125000 ohm	ClassA;ParallelFilaments
Transconductance	1350 uS	ClassA;ParallelFilaments
Load resistance	13000 ohm	ClassA;ParallelFilaments
Power output	0.2 W	ClassA;ParallelFilaments

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	1.4 V	—
HeaterOrFilamentCurrent	50 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
CenterTappedFilament	1 boolean	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1999 Philips 0-D

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

1999 PHILIPS 0-D

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament current	50 ma	Filament current 50 ma
Cathode current (withoutsizggf) max.2x3	1 ma	Cathode current (withoutsizggf) max.2x3.1 ma
Plate current 3.5	5 ma	Plate current 3.5 5.0 ma
Grid No.2 current 0.75	1.1 ma	Grid No.2 current 0.75 1.1 ma
Grid No	1 A	Grid No.1 A.C. voltage at 17 1.5 volts,rms

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