



ELECTRONIC TUBE REFERENCE

CF50

Voltage Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

High-gain pentode designed specifically for microphone preamplifiers and other low-level resistance-coupled audio stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	30 V / 200 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	2500000 Ω
TRANSCONDUCTANCE	0.0033 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	10 mA
<i>Promoted from clearly identified published ratings/characteristics; additional operating points, capacitances, rectifier conditions, and application-specific values are retained in TUBE_SECTION_PARAMETER.</i>	

High-gain pentode intended for microphone preamplifier and low-level resistance-coupled audio service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V1

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 1 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	13.8 pF	Section1
Grid capacitance	12.3 pF	Section1
Grid-to-plate capacitance maximum	0.03 pF	Section1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	MicrophonePreamplifier
Screen voltage	100 V	MicrophonePreamplifier
Control-grid voltage	-2 V	MicrophonePreamplifier
Plate current	1.5 mA	MicrophonePreamplifier
Screen current	0.3 mA	MicrophonePreamplifier
Application	Microphone preamplifier	Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	3300 μ S	Section1
Amplification factor	45	Section1
Plate resistance	2.5 M Ω	250VPlate

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
Typical plate voltage	250 V	—
Maximum screen dissipation	0.5 W	—