



ELECTRONIC TUBE REFERENCE

AX50

Rectifier - Full Wave electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-RECTIFIER

Directly heated gas-filled full-wave rectifier for higher-current power supplies. Its heavy four-volt filament and low gas-discharge forward voltage provide efficient moderate-current rectification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	4 V / 3.75 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier	
NOMINAL OUTPUT CURRENT	275 mA
PEAK FORWARD CURRENT	1 A
FORWARD VOLTAGE DROP	15 V
<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>	

SECTION2 Rectifier	
NOMINAL OUTPUT CURRENT	275 mA
PEAK FORWARD CURRENT	1 A
FORWARD VOLTAGE DROP	15 V
<i>Second physical rectifier section; promoted electrical properties populated from identical section.</i>	

Gas-filled directly heated full-wave rectifier for power-supply 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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AC supply voltage per plate maximum	500 V RMS	FullWave
DC output current maximum	275 mA	FullWave
Maximum input capacitor	64 μ F	CapacitorInputFilter
Peak plate current maximum	1000 mA	CapacitorInputFilter
Choke-input inductance	6 H	ChokeInputFilter
Choke-input capacitor	50 μ F	ChokeInputFilter

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube voltage drop maximum	15 V	GasFilled

1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 2 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AC supply voltage per plate maximum	500 V RMS	FullWave

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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum transformer secondary voltage	2x500 V RMS	CapacitorInputFilter
Maximum DC output current	275 mA	—
Maximum peak anode current	1000 mA	—
Maximum forward voltage drop	15 V	—
Maximum filter input capacitance	64 uF	CapacitorInputFilter
Minimum series resistance per anode	100 ohm	FilterCapacitance=16uF
Minimum series resistance per anode	150 ohm	FilterCapacitance=32uF
Minimum series resistance per anode	200 ohm	FilterCapacitance=64uF
Maximum transformer secondary voltage	500 V RMS	ChokeInputFilter

1999 PHILIPS 0-D
Section 2 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum transformer secondary voltage	2x500 V RMS	CapacitorInputFilter
Maximum DC output current	275 mA	—

TUBE TINKER

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and their source documents.

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