



ELECTRONIC TUBE REFERENCE

PY82

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Indirectly heated single-anode rectifier diode for power supplies. Rated for approximately 700 V peak inverse voltage and 180 mA nominal rectified output for equipment using series-heater chains.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9C12	BASE PINS	9
NOMINAL HEATER	19 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	700 V
NOMINAL OUTPUT CURRENT	180 mA
MAXIMUM HEATER-CATHODE VOLTAGE	550 V
<i>Published values promoted where clearly readable; identical repeated sections compressed when applicable.</i>	

Single-anode rectifier diode for power-supply service. The supplied French datasheet was translated to English for descriptive output.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1951 Philips Receiving Tubes for Television

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

1951 PHILIPS RECEIVING TUBES FOR TELEVISION

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
RMS Input Voltage	250 V	—
Output Current	180 mA	—
Reservoir Capacitance	60 uF	—
Limiting Resistor	125 ohm	Input=250Vrms
DC Output Voltage	195 V	Input=250Vrms; OutputCurrent=180mA
Maximum Heater Voltage During Warmup	28.5 V	—



SOURCE OPERATING CONDITIONS

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1953 La Radiotechnique

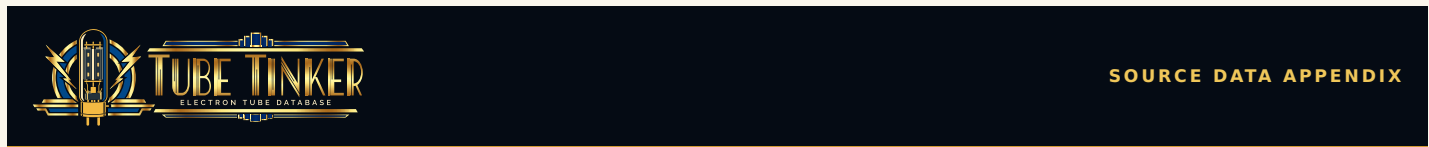
Published test conditions and operating points. Values on this page are preserved as reported by this source.

1953 LA RADIOTECHNIQUE

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Indirect (cathode isolee du filament)	300 mA	Rectifier
Alimentation du filament en serie Vf	19 V	Rectifier
Perveance	2.7 mA/V	Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage	700 V	Rectifier
Rectified output current	180 mA	Rectifier



SOURCE OPERATING CONDITIONS

1953 RFT Rundfunk Technik

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

1953 RFT RUNDFUNK TECHNIK

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transformer voltage	250 V	—
Rectified current	180 mA	—
Transformer voltage maximum	250 V	—
Inverse plate voltage maximum	700 V	—
DC output current maximum	180 mA	—



SOURCE OPERATING CONDITIONS

1957 Philips Receiving and Amplifying Tubes

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

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
RMS transformer voltage maximum	250 V	—
Filter capacitance maximum	60 uF	—



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1958 Mullard Receiving Tubes

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

1958 MULLARD RECEIVING TUBES

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
RMS input maximum	250 V	—



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195X Tesla

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

195X TESLA

Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	19 V	Published nominal value or midpoint of published range
Heater current	300 mA	Published nominal value or midpoint of published range

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum rectified current	180 mA	Published maximum


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1963 Philips Electron Tubes Handbook V1

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1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transformer secondary voltage	250 Vrms	CapacitorInputFilter
Filter capacitance	60 uF	CapacitorInputFilter
Series resistance	125 ohm	250Vrms
DC output current	180 mA	CapacitorInputFilter
DC output voltage	195 V	250Vrms
Peak inverse voltage	700 V	—
Maximum heater-cathode voltage	550 V	—


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1968 Mazda Belvu

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1968 MAZDA BELVU

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tension filament uereceeeneneneennnnnnnnnnnnnnne 0 V	19 V	—
Courant filament Jf	300 mA	—
Tension inverse de crete danode ... Vaicr	700 V	—
Courant redressé..... Ired	180 mA	—
Tension de crête entre filament et cathode -Vfk er	550 V	—
Condensateur à l'entrée du filtre CL	60 uF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
avec un condensateur de	60 uF	—
Courant redressé ... Ired 180 180 180 180	180 mA	—
Tension redressée . Vred 195 195 / 195 195	1127 V	—
Va = 250 Veff; Ra =	125 Ω	—
Va = 240 Veff; Ra =	105 Ω	—
Va = 127 Veff; Ra =	0 Ω	—



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1972 Philips Receiving Tubes

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

1972 PHILIPS RECEIVING TUBES

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	19 V	Nominal

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterCurrentNominal	300 mA	Nominal
Maximum Peak Inverse Voltage	700 V	—
Rectified Output Current	180 mA	—
TransformerVoltageRMS	250 V	Single-phase half-wave rectifier


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1973 Mazda Valves Binder 2

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

1973 MAZDA VALVES BINDER 2

Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	19 V	Published nominal value
Heater current	300 mA	Published nominal value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum reservoir capacitor	60 uF	Published
Maximum DC output current	180 mA	Published


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1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D.C. current I	180 mA	D.C. current I 180 mA
Heater current I;	300 mA	Heater current I; 300 mA
Heater voltage Vi	19 V	Heater voltage Vi 19V
D.C. output voltage Vo 195 195 195 195	127 V	D.C. output voltage Vo 195 195 195 195 127 V
D.C. current I 180 180 180 180	180 mA	D.C. current I 180 180 180 180 180 mA
Anode voltage, peak inverse Vainvp max.,	700 V	Anode voltage, peak inverse Vainvp max., 700 V
D.C. current I, max	180 mA	D.C. current I, max. 180 mA
Input capacitance of smoothing filter Cggy, max.,	60 uF	Input capacitance of smoothing filter Cggy, max., 60 uF 2)
at transformer voltage Vir 250 240 220 200	127 V	at transformer voltage Vir 250 240 220 200 127 V