



ELECTRONIC TUBE REFERENCE

DY86

Rectifier - TV Line Scan Boost electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Dedicated television high-voltage flyback rectifier for generating CRT accelerating voltage from horizontal-output transformer pulses. Its directly heated filament operates at the elevated EHT output potential.

GENERAL CHARACTERISTICS

BASE DESIGNATION	NOVAL	BASE PINS	9
NOMINAL HEATER	1.4 V / 550 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	22000 V
NOMINAL OUTPUT CURRENT	0.5 mA
PEAK FORWARD CURRENT	40 mA
Pulse service ratings include 22 kV inverse voltage, 800 uA rectified current and 40 mA peak current.	

High-voltage half-wave rectifier for television flyback EHT supplies.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	1.4 V	Published nominal value
Heater current	530 mA	Published nominal value

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage	22000 V	Published rectifier limit



SOURCE OPERATING CONDITIONS

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1967 Mullard Receiving and Amplifying Valves

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

1967 MULLARD RECEIVING AND AMPLIFYING VALVES

Section 1 · Rectifier

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output Current	500 uA	PulsedInput
Peak Anode Current	40 mA	PulseDuration<=10us
Maximum Reservoir Capacitance	2000 pF	—
Peak Inverse Voltage	22000 V	—
Nominal Output Current	0.5 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Forward Current	40 mA	—
Interelectrode Capacitance Data Published	1	SourceTablePresent

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode to Heater-Cathode- Strap Capacitance	1.55 pF	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage Vi	1.4 V	—
Heater current I _ϕ	550 mA	—
age can be adjusted to	1.4 V	—
current of	200 A	—
Output voltage Vo max	—18 kV	Maximum
Peak inverse voltage Va invp max	—22 kV	Maximum
(Absolute max.) Va invy, max	—27 kV	Maximum
Peak inverse voltage without current Vga invp(lo = 0) max	—24 kV	Maximum
Output current Iy max	—0.5 mA	Maximum
Peak output current Iap max	—40 mA	Maximum

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode to all Ca	1.55 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
2y During short periods as in television service I = max	—0.8 mA	Maximum

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output current I	0.15 mA	—
Output voltage Vo	18 kV	—


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	1.4 V	Nominal
HeaterCurrentNominal	550 mA	Nominal
Maximum Peak Inverse Voltage	22000 V	—
Rectified Output Current	0.5 mA	—
PeakForwardCurrent	40 mA	—
XRaysShieldingAdvisedAbovePIV	16000 V	Published X-ray shielding note


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode to all capacitance	1.55 pF	WithoutExternalShield

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical DC output current	0.15 mA	—
Typical DC output voltage	18000 V	—
Maximum DC output voltage	18000 V	—
Maximum peak inverse voltage	22000 V	DesignCentre
Absolute maximum peak inverse voltage	27000 V	AbsoluteMaximum
Maximum average output current	0.5 mA	—
Maximum peak output current	40 mA	PulseRated
Maximum filter input capacitance	2000 pF	—
Maximum peak inverse voltage without output current	24000 V	Io=0
Short-period output current	0.8 mA	TelevisionService
Peak-current pulse duration maximum	10 us	Duty<=10%LineCycle