



ELECTRONIC TUBE REFERENCE

GY501

Rectifier - TV Line Scan Boost electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Very-high-voltage rectifier for color-television CRT EHT supplies, with manufacturer warning of X-ray emission above approximately 18 kV.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	3.15 V / 400 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	33500 V
NOMINAL OUTPUT CURRENT	1.7 mA
PEAK FORWARD CURRENT	100 mA
<i>Single-anode EHT rectifier for color television; high-voltage limiting value promoted.</i>	

Very-high-voltage rectifier for color-television picture-tube EHT supplies; the source warns of X-ray emission above 18 kV.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1959 Telefunken

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

1959 TELEFUNKEN

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Output Voltage	25000 V	FlybackPulse
Typical Output Current	1.5 mA	—
Peak Inverse Voltage	33500 V	FlybackPulse



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
atmospheric pressure (	450 mm	Published in approved GY501 target datasheet entry; Section1
V	25000 V	Published in approved GY501 target datasheet entry; Section1
P.1. V. max. (see note 2)	31000 V	Published in approved GY501 target datasheet entry; Section1
V max	25000 V	Published in approved GY501 target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
a _h+k	1.2 pF	Published in approved GY501 target datasheet entry; Section1


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	3.15 V	Published nominal or stated operating value
Heater or filament current	370 mA	Published nominal or stated operating value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Rectified voltage	27.5 kV	Published maximum
X-ray warning threshold	18 kV	Source warning


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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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	3.15 V	Published nominal value
Heater current	400 mA	Published nominal value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum rectified voltage	27.5 kV	Published
X-ray warning threshold	18 kV	Published warning



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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. output voltage v	25 kV	D.C. output voltage v 25 kV
Anode current I	1.5 mA	Anode current I 1.5 mA
Heater voltage Vr	3.15 v	Heater voltage Vr 3.15 vl
Heater current I _h	400 mA	Heater current I _h 400 mA
Pins	5 a	Pins 1, 5 and 9 may be used to connect an anti-corona ring.
Pins	9 ma	Pins 1, 5 and 9 may be used to connect an anti-corona ring.
sistor) may be connected to pins	3 a	sistor) may be connected to pins 3 and 7. These pins must never be earthed.
I to be expected in practice, V _{epmg} should be	3.15 V	I to be expected in practice, V _{epmg} should be 3.15 V. __
Anode to cathode Caik	1.2 pF	Anode to cathode Caik 1.2 pF
Output voltage Vo	25 kv	Output voltage Vo 25 kv
Peak inverse voltage (absolute max.) V _{ainvp} max	35 kv	Peak inverse voltage (absolute max.) V _{ainvp} max. 35 kv 1y
Output voltage (absolute max.) Vo max	27.5 kV	Output voltage (absolute max.) Vo max. 27.5 kV
Output current, average Is	1.7 mA	Output current, average Is 1.7 mA
peak Iop max	100 mA	peak Iop max. 100 mA 2)

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
35 area of permissible operation	35 a	35 area of permissible operation