

ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA

1X2B

1 SECTION
CONSTRUCTION
RECTIFIER

Rectifier - TV Line Scan Boost electronic tube

Filamentary high-voltage rectifier for television flyback/EHT service. It converts horizontal-output transformer pulses into CRT accelerating voltage with a low-power directly heated filament at elevated potential.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9Y	BASE PINS	9
NOMINAL HEATER	1.25 V / 200 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

9Y - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – F1	–	F – Filament	CONNECTED
PIN2 – F2	–	F – Filament	CONNECTED
PIN3 – IC	–	–	IC
PIN4 – F1	–	F – Filament	CONNECTED
PIN5 – F2	–	F – Filament	CONNECTED
PIN6 – F1	–	F – Filament	CONNECTED
PIN7 – IC	–	–	IC
PIN8 – F2	–	F – Filament	CONNECTED
PIN9 – F1	–	F – Filament	CONNECTED
CAP1 – P	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	22000 V
NOMINAL OUTPUT CURRENT	0.5 mA
PEAK FORWARD CURRENT	45 mA
FORWARD VOLTAGE DROP	100 V
<i>Pulsed high-voltage rectifier.</i>	

Directly heated high-voltage television rectifier diode (1X2B) for flyback service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Brimar Radio Valve No 7

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

1958 BRIMAR RADIO VALVE NO 7

Section 1 · Rectifier

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	1.25 V	—
Filament Current	200 mA	—
Anode-to-Filament Capacitance	1 pF	Approximate

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Inverse Voltage	25000 V	—
Peak Anode Current	12 mA	—
DC Anode Current	2 mA	—



SOURCE OPERATING CONDITIONS

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195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Rectifier

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum inverse voltage	18000 V	TVFlyback; InverseVoltageDCComponent
Maximum DC output current	0.5 mA	TVFlyback; InverseVoltageDCComponent

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak current	45 mA	TVFlyback; InverseVoltageDCComponent

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Forward voltage drop	100 V	TVFlyback; InverseVoltageDCComponent; At 7 mA DC



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1961 Tung Sol

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

1961 TUNG SOL
Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	1.25 V	Nominal
Heater current	200 mA	Nominal



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1965 Westinghouse Data Book

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

1965 WESTINGHOUSE DATA BOOK
Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	1.25 V	—
Filament Current	200 mA	—
Plate-to-Filament Capacitance	1 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube Voltage Drop	100 V	PlateCurrent=7mA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Inverse Plate Voltage	22000 V	Flyback
Steady-State Peak Plate Current	45 mA	—
DC Output Current	0.5 mA	—
Positive Peak Plate Voltage	18000 V	—
Negative Peak Plate Voltage	-2000 V	—
DC Output Voltage	18000 V	—
DC Output Current	100 uA	—


SOURCE DATA APPENDIX

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1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage maximum	22000 V	FlybackRectifier
Average plate current maximum	0.5 mA	FlybackRectifier
Application	Television high-voltage rectifier	Section1


SOURCE DATA APPENDIX

1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7
Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	1.25 V	—
Heater/filament current	200 mA	—
Peak inverse plate voltage total DC plus peak	22000 V	PulsedRectifier
Maximum DC component of inverse plate voltage	18000 V	PulsedRectifier
Peak plate current	45 mA	PulsedRectifier
Average plate current	0.5 mA	PulsedRectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube voltage drop	100 V	PlateCurrent=7mA

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	High-voltage half-wave pulsed rectifier	TelevisionFlyback

TUBE TINKER

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and their source documents.

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