



ELECTRONIC TUBE REFERENCE

5642

Diode (NOT rectifier) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Subminiature directly heated high-voltage half-wave vacuum rectifier with approximately 10 kV inverse capability, suitable for high-frequency and pulsed rectifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	Special2Lead	BASE PINS	2
NOMINAL HEATER	1.25 V / 200 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
PEAK INVERSE VOLTAGE	10000 V
NOMINAL OUTPUT CURRENT	0.25 mA
PEAK FORWARD CURRENT	5 mA
FORWARD VOLTAGE DROP	70 V
<i>Electrical section extracted from supplied datasheet.</i>	

Mullard rectifier with published ratings and characteristics extracted from the supplied datasheet.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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 Peak Inverse Voltage	10000 V	HalfWave
Maximum DC Output Current	0.25 mA	HalfWave
Maximum Peak Current	5 mA	HalfWave

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Forward Voltage Drop	70 V	HalfWave



SOURCE OPERATING CONDITIONS

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1960 RCA Industrial and Communications Types

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

1960 RCA INDUSTRIAL AND COMMUNICATIONS TYPES

Section 1 · Rectifier

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum supply frequency	400 kHz	—


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1963 Mullard

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

1963 MULLARD

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	1.25 V	—
HeaterOrFilamentCurrent	200 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
RMSInputVoltage	3.6 kV	SineWaveInput
DC Output Current	250 uA	SineWaveInput
LimitingResistance	470 kohm	SineWaveInput
Reservoir Capacitance	0.02 uF	SineWaveInput
DC Output Voltage	4.5 kV	SineWaveInput


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1971 RCA HB3 Binder 3 of 7

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

1971 RCA HB3 BINDER 3 OF 7

Section 1 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Rectifier maximum peak inverse voltage	—10000 V	—
Rectifier nominal output current	—0.25 mA	—
Rectifier peak forward current	—5 mA	—
Peak-pulse plate voltage	8000 V	—
DC output voltage, two tubes	12000 V	—
DC output current	0.15 mA	—
Supply frequency minimum	5 kHz	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to filament	0.6 pF	—



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-filament capacitance	0.6 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse voltage	10 kV	—
Maximum anode current	250 uA	—
Peak anode current	5 mA	PulseInput;PulseDuration<=10us;Duty<=15%

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak anode current	1.5 mA	SineWaveInput;Frequency>=5kHz

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

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