



ELECTRONIC TUBE REFERENCE

6894

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
RECTIFIER

Mercury-vapor high-current half-wave rectifier for high-voltage power supplies. Its heavy filament and gas-assisted conduction provide multiampere output at tens of kilovolts.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 10 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	20000 V
NOMINAL OUTPUT CURRENT	2.5 A
PEAK FORWARD CURRENT	5 A
WARM-UP TIME	30 s
<i>Promoted fields populated from published ratings/characteristics; additional published values retained in TUBE_SECTION_PARAMETER.</i>	

Mercury-vapor or gas-filled high-current rectifier for power-supply service. The supplied datasheet was reviewed for heater/filament data, maximum ratings, operating conditions, capacitances, pulse/RF data, and thermal limits.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 Eimac

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

1962 EIMAC

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Current	9 A–11 A	—
Anode Starting Voltage Approximate	20 V	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Inverse Anode Voltage	20 kV	CondensedMercury=20-50C
Peak Inverse Anode Voltage	15 kV	CondensedMercury=20-55C
Peak Inverse Anode Voltage	10 kV	CondensedMercury=20-60C
Peak Anode Current	5 A	QuadratureFilamentExcitation
Peak Anode Current	3 A	InPhaseFilamentExcitation
Average Anode Current	2.5 A	QuadratureFilamentExcitation
Average Anode Current	1.8 A	InPhaseFilamentExcitation
Maximum AC Short Circuit Current	100 A	Duration<=100ms

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Eimac Tube Manual

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

1965 EIMAC TUBE MANUAL

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Current Range	9 A–11 A	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Heating Time	30 s	—
Anode Starting Voltage	20 V	—
Peak Inverse Voltage at 20-50C	20000 V	—
Peak Inverse Voltage at 20-55C	15000 V	—
Peak Inverse Voltage at 20-60C	10000 V	—
Peak Anode Current Quadrature	11.5 A	—
Peak Anode Current InPhase	8.3 A	—
Average Anode Current Quadrature	2.5 A	—
Average Anode Current InPhase	1.8 A	—
AC Short Circuit Current Maximum	100 A	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 6 of 7

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

1971 RCA HB3 BINDER 6 OF 7

Section 1 · Rectifier

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pin 2 - Filament, — published value 1	2	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pin 2 - Filament, – published value 2	4	Published datasheet value


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1975 Eimac Tube Manual

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

1975 EIMAC TUBE MANUAL

Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Current Range	9 A–11 A	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Starting Voltage	20 V	—
Peak Inverse Voltage at 20-50C	20000 V	—
Peak Inverse Voltage at 20-55C	15000 V	—
Peak Inverse Voltage at 20-60C	10000 V	—
Peak Anode Current Quadrature	11.5 A	—
Peak Anode Current InPhase	8.3 A	—
Average Anode Current Quadrature	2.5 A	—
Average Anode Current InPhase	1.8 A	—
AC Short Circuit Current Maximum	100 A	—


SOURCE DATA APPENDIX

1976 Eimac Tube Manual

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

1976 EIMAC TUBE MANUAL
Section 1 · Rectifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Current Range	9 A–11 A	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Starting Voltage	20 V	—
Peak Inverse Voltage at 20-50C	20000 V	—
Peak Inverse Voltage at 20-55C	15000 V	—
Peak Inverse Voltage at 20-60C	10000 V	—
Peak Anode Current Quadrature	11.5 A	—
Peak Anode Current InPhase	8.3 A	—
Average Anode Current Quadrature	2.5 A	—
Average Anode Current InPhase	1.8 A	—
AC Short Circuit Current Maximum	100 A	—

TUBE TINKER

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