



ELECTRONIC TUBE REFERENCE

7018

Rectifier - Half Wave electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

RECTIFIER

Directly heated mercury-vapor/gas-filled high-current rectifier for industrial supplies. Its heavy filament and low arc voltage provide ampere-class output at higher inverse voltage.

GENERAL CHARACTERISTICS

BASE DESIGNATION	4AU	BASE PINS	4
NOMINAL HEATER	2.5 V / 7 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Rectifier	
MAXIMUM CATHODE CURRENT	2.5 A
PEAK INVERSE VOLTAGE	2000 V
NOMINAL OUTPUT CURRENT	2.5 A
PEAK FORWARD CURRENT	10 A
FORWARD VOLTAGE DROP	12 V
Representative electrical section from supplied RCA data sheet.	

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](#)

1957 National Electronics

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

1957 NATIONAL ELECTRONICS

Section 1 · Rectifier

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC output current	2.5 A	—
Maximum instantaneous output current	10 A	—
Maximum peak inverse voltage	2000 V	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament heating time	20 s	—
Typical arc drop	12 V	—
Typical anode starting voltage	13 V	—

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filling	Mercury vapor	—

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Service	Industrial power rectifier	—

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
Voltage (AC)	2.5	Published datasheet value
Current at 2.5 volts – published value 1	2.5 A	Published datasheet value
Current at 2.5 volts – published value 2	7 A	Published datasheet value
Current at 2.5 volts – published value 3	1 A	Published datasheet value
Peak Tube Voltage Drop at anode amperes = 8 – published value 1	8 A	Published datasheet value
Peak Tube Voltage Drop at anode amperes = 8 – published value 2	12 A	Published datasheet value
Pin 1-Filament – published value 1	1	Published datasheet value
Pin 1-Filament – published value 2	4	Published datasheet value
Pin 2 - Filament	2	Published datasheet value
Pin 3-Filament	3	Published datasheet value
Temperature (Approx.)	30	Published datasheet value
For yower-suyyly frequency of 60 cys	6	Published datasheet value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Anode Starting Voltage	13	Published datasheet value
PEAK INVERSE ANODE VOLTAGE	2 A	Published datasheet value
Peak	10 mA	Published datasheet value
Peak inverse anode voltage	2000 V	Published rectifier rating

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum average anode/DC output current	2.5 A	Published rectifier rating

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