



ELECTRONIC TUBE REFERENCE

627

Specialized - Thyatron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

THYRATRON

Gas-filled grid-controlled thyatron for controlled rectifier, relay, motor-control, industrial switching, or pulse service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	2.5 V / 6 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Thyatron	
MAXIMUM PLATE VOLTAGE	1250 V
MAXIMUM CATHODE CURRENT	2.5 A
PEAK INVERSE VOLTAGE	2500 V
NOMINAL OUTPUT CURRENT	640 mA
PEAK FORWARD CURRENT	2.5 A
FORWARD VOLTAGE DROP	12 V
Thyatron section; peak/average current, inverse voltage, timing, and gas/mercury data retained as parameters.	

Grid-controlled vapor rectifier for controlled high-current rectification and switching service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1947 Westinghouse

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

1947 WESTINGHOUSE

Section 1 · Thyatron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	2.5 V	Nominal
HeaterCurrentNominal	6 A	Nominal
Maximum Peak Inverse Voltage	2500 V	—
AverageOrDCOutputCurrent	640 mA	—
MaximumPeakForwardCurrent	2.5 A	—
Peak Forward Anode Voltage	1250 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Forward Voltage Drop	12 V	—
IonizationTimeMaximum	10 us	—
DeionizationTimeMaximum	1000 us	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 2 of 7

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

1971 RCA HB3 BINDER 2 OF 7

Section 1 · Thyatron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak forward anode voltage	1250 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak inverse anode voltage	2500 V	—
Peak cathode/anode current	2.5 A	—
Average cathode/anode current	640 mA	—
Fault or surge current	25 A	ShortDuration
Ambient temperature range	25 to 70 C condensed-mercury	—
Filament voltage	2.5 V	—
Filament current	6 A	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ionization time	10 us	Approximate
Deionization time	1000 us	Approximate
Anode voltage drop	12 V	Conducting
Minimum heating time	10 s	BeforeConduction

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Gas fill	Mercury vapor	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-anode capacitance	2.5 pF	Approximate