ELECTRONIC TUBE REFERENCE

6855

Specialized - Thyratron electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
THYRATRON

Directly heated gas-and-mercury-vapor negative-control thyratron for grid-controlled rectifier service, combining substantial peak current with triggered power conduction.

General characteristics

BASE DESIGNATION	4D	**BASE PINS**	4
NOMINAL HEATER	2.5 V / 800 mA	**PARALLEL HEATER**	— / —
HEATING	Direct	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Thyratron

MAXIMUM PLATE VOLTAGE	1250 V
MAXIMUM CATHODE CURRENT	1 A
FORWARD VOLTAGE DROP	8 V

Thyratron has no canonical SectionType; Other used. MaxCathodeCurrent uses published maximum average cathode current; peak/fault currents preserved separately.

RCA 716/6855 is a directly heated gas-and-mercury-vapor thyratron for grid-controlled rectifier service, rated for 1250-V peak forward/inverse anode voltage and high peak cathode current.

SOURCE OPERATING CONDITIONS

1968 General Electric Co

SOURCE PDF

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

1968 GENERAL ELECTRIC CO

Section 1 · Thyratron

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Peak cathode current	**8 A**	—
Average cathode current	**1 A**	—
Fault cathode current	**80 A**	—
Peak inverse anode voltage	**1250 V**	—

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1971 RCA HB3 Binder 2 of 7

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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 · Thyratron

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Filament voltage	**2.5 V**	Nominal
Filament current	**6.3 A**	Nominal
Maximum deionization time	**1000 us**	—
Maximum critical grid current	**10 uA**	—
Peak forward anode voltage	**1250 V**	—
Peak inverse anode voltage	**1250 V**	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak negative grid voltage before conduction	**500 V**	—
Peak negative grid voltage during conduction	**10 V**	—
Peak anode/cathode current	**8 A**	—
Average anode/cathode current	**1 A**	—
Fault current	**80 A**	Short-duration fault rating
Ambient or condensed-mercury operating temperature range	**-40 to +80 condensed-mercury operating range C**	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum heating time prior to tube conduction	**15 s**	—
Ionization time	**10 us**	Approximate
Anode voltage drop	**8 V**	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-anode capacitance	**3 pF**	Approximate

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