

ELECTRONIC TUBE REFERENCE

4C35

Specialized - Thyatron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
THYRATRON

Hot-cathode grid-controlled hydrogen thyatron for high-voltage, high-current pulse service, providing rapid switching of substantial stored energy in pulsed-power circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7	BASE PINS	4
NOMINAL HEATER	6.3 V / 6.1 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Thyatron	
MAXIMUM PLATE VOLTAGE	8000 V
Explicit equivalent designation on Toshiba 1G35P sheet.	

Hot-cathode grid-controlled hydrogen thyatron for high-voltage, high-current pulse service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Thyatron

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Gas filling	Hydrogen	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Starting anode voltage minimum	2500 V	—
Peak inverse anode voltage maximum	8000 V	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Raytheon Special Purpose Tubes

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195X RAYTHEON SPECIAL PURPOSE TUBES

Section 1 · Thyatron

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak inverse anode voltage	2500 V	PulsingOrSwitching
Maximum peak cathode current	90 A	PulsingOrSwitching
Maximum average cathode current	100 mA	PulsingOrSwitching

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Amperex Condensed

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1963 AMPEREX CONDENSED

Section 1 · Thyatron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak forward anode voltage maximum	8000 V	HydrogenThyatron;Pulse
Peak anode current maximum	50 A	HydrogenThyatron;Pulse
Average anode current maximum	100 mA	HydrogenThyatron;Pulse
Pulse width maximum	2 μ s	HydrogenThyatron;Pulse

SOURCE OPERATING CONDITIONS

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1963 Philips Electron Tubes Handbook V3

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1963 PHILIPS ELECTRON TUBES HANDBOOK V3

Section 1 · Thyatron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Device family	Hydrogen thyatron	Section1
Source reference	See chapter Tubes for Microwave Equipment in this volume	SourceCrossReference

SOURCE OPERATING CONDITIONS

1982 Toshiba

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1982 TOSHIBA

Section 1 · Thyatron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Anode Current	90 A	—
Average Anode Current	100 mA	—
Minimum DC Supply Voltage	2500 V	—
Maximum Rate of Rise of Anode Current	1000 A/us	—
Pulse Repetition Rate	2500 pps	—
Pulse Duration	6 us	—
DC Anode Supply Voltage	4000 V	PulseModulator
Pulse Repetition Rate	2250 pps	PulseModulator
Pulse Width	0.5 us	PulseModulator
Peak Power Output	310 kW	PulseModulator
DC Anode Current	94 mA	PulseModulator

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips 0-D

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1999 PHILIPS 0-D

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak anode voltage	8 kV	—
Peak inverse anode voltage	8 kV	—
Peak anode current	90 A	—
Mean anode current	100 mA	—
Current rise rate	1000 A/us	—
Pulse duration	6 us	—
Minimum positive grid voltage	175 V	—
Inverse grid voltage max	200 V	—