

ELECTRONIC TUBE REFERENCE

CH1095

Specialized - Thyatron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
THYRATRON

Zero-bias hydrogen thyatron designed specifically for crowbar protection circuits, capable of roughly 800 A peak current at approximately 18 kV.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 16 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Thyatron	
MAXIMUM PLATE VOLTAGE	25000 V
MAXIMUM CATHODE CURRENT	800 A
FORWARD VOLTAGE DROP	200 V
WARM-UP TIME	600 s
Published ratings and characteristics mapped semantically; identical repeated sections compressed.	

Zero-bias hydrogen thyatron for crowbar protection circuits, capable of about 800 A peak current at 18 kV.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Thyatron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	16 A	—
Cathode heater current minimum	15 A	—
Cathode heater current bogey	16 A	—
Cathode heater current maximum	22 A	—
Reservoir voltage minimum	3 V	Reservoir
Reservoir voltage maximum	5.5 V	Reservoir
Peak cathode current	800 A	Pulse
Average cathode current	100 mA	—
DC anode voltage maximum forward	18000 V	—
DC anode voltage maximum inverse	5000 V	—
Grid signal voltage minimum	1000 V	—
Grid signal voltage maximum	2000 V	—
Grid impedance minimum	50 ohm	—
Grid impedance maximum	500 ohm	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode delay time maximum	0.6 us	—
Anode voltage drop minimum	50 V	—
Anode voltage drop maximum	200 V	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 3 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 3 OF 4

Section 1 · Thyatron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode heater voltage minimum	6 V	—
Cathode heater voltage nominal	6.3 V	—
Cathode heater voltage maximum	6.6 V	—
Cathode heater current minimum	15 A	—
Cathode heater current nominal	16 A	—
Cathode heater current maximum	22 A	—
Reservoir voltage minimum	3 V	HydrogenReservoir
Reservoir voltage maximum	5.5 V	HydrogenReservoir
Reservoir current maximum	6.7 A	HydrogenReservoir
DC anode forward voltage minimum	2 kV	CrowbarService
DC anode forward voltage maximum	18 kV	CrowbarService
DC anode inverse voltage maximum	5 kV	CrowbarService
Peak cathode current	800 A	CrowbarService
Average cathode current	1 A	CrowbarService
Conduction time per fault	0.1 s	CrowbarService
Averaging time	80 s	CrowbarService
Grid signal voltage minimum	1000 V	Trigger

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid signal voltage maximum	2000 V	Trigger
Grid impedance minimum	150 ohm	Trigger
Grid impedance maximum	500 ohm	Trigger
Ambient temperature minimum	-50 degC	—
Ambient temperature maximum	75 degC	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode heating time	10 min	—
Reservoir heating time	10 min	HydrogenReservoir
Recovery time	50 us	CrowbarService
Grid voltage rate of rise	1800 V/us	Trigger
Anode delay time	0.6 us	Trigger
Anode voltage drop minimum	50 V	Conducting
Anode voltage drop maximum	200 V	Conducting

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Gas fill	Hydrogen	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Crowbar protection circuit	HighVoltagePowerSupplyProtection

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

[Catalog](#)
[Tube types](#)
[Full books](#)
[Blog](#)
[Feedback & corrections](#)

© 2026 Tube Tinker