

ELECTRONIC TUBE REFERENCE

7191

Specialized - Thyatron electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
THYRATRON

Rugged zero-bias miniature hydrogen thyatron for pulse-generation service. Its compact construction provides fast, repeatable gas switching in demanding equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	6.3 V / 1.8 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Thyatron	
MAXIMUM CATHODE CURRENT	20 A
Published ratings and characteristics promoted from approved datasheet.	

THE 7191 IS A ZERO BIAS MINIATURE HYDROGEN THYRATRON DESIGNED PRIMARILY



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Gas	Hydrogen	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PeakForwardAnodeVoltageMaximum	1200 V	—
PeakInverseAnodeVoltageMaximum	1200 V	—
Average Cathode Current Maximum	50 mA	—
RMSCathodeCurrentMaximum	1 A	—
OperatingFrequencyTested	5000 Hz	—
CurrentRateOfRiseMaximum	400 A/us	—
AnodeDelayTimeMaximum	0.6 us	—
Cathode Heating Time	30 s	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 4 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

Section 1 · Thyatron

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Nominal
Heater current	1.8 A	Nominal
Maximum cathode current	50 mA	Promoted published value
(WITH BOGIE HEATER VOLTAGE) If 1.6 1.6 2.0 AMP.	2 A	—
DC ANODE VOLTAGE Ebb	300 V	RATINGS
HEATER –CATHODE VOLTAGE Ehk –100	25 V	RATINGS
PEAK INVERSE GRID VOLTAGE egx	150 V	RATINGS
iIN PU LSE0 OPERATION, THE PEAK INVERSE VOLTAGE, E% C LU5IVE OF A SPIKE OF 0.05 uSEL. MA%I MUM	0.05 mA	RATINGS
DURATION, SMALL NOT E% CERD 500 VOLT\$ DURING THE FIRST 25 uG EC, FOLLOWING THE ANODE PULSE.	25 mA	RATINGS
THE GRID VOLTAGE PULSE WNICN IS 2F PERCENT OF TXE MA%I MU M. UN LOADED PULSE AMPII TUDE AND THE	2 mA	RATINGS
TINE JITTER IS MEASURED AT 50 PERF,ENT OF 'THE PULSE AMPII TUDE AFTER THE TUBE HAS BEEN OPERATING	50 A	RATINGS
VOLTAGES APPLIED OVER A RANGE OF 50 TO 2000 TO SOCPS AT 15G IN 4 MINUTES.	4 Hz	RATINGS
HEATER POWER. THE BOGEY HEATERVOLTAGE OF	63 V	RATINGS
PEAK VOLTAGE 20	500 V	TYPICAL OPERATION
VOLTAGE RATE OF RISE μ SEC. 350 VOLTS	35 V	TYPICAL OPERATION

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
ICAL VIBRATION. THIS TUBE CAN SUPPLY PEAK PULSE POWER OF 10 KILOWATTS	10 W	—
CATHODE HEATING TIME t _h	30 s	—
ANODE VOLTAGE DROP (AT RECOMMENDED E _f) e _{td} q	125 V	—

TUBE TINKER

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