

ELECTRONIC TUBE REFERENCE

2T4

Voltage - Triode (single high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Series-heater UHF oscillator triode for television receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7DK	BASE PINS	7
NOMINAL HEATER	2.35 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7DK - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – P	A	P – Plate (Anode)	CONNECTED
PIN2 – G1	A	G1 – Control Grid	CONNECTED
PIN3 – H	–	H – Heater	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – K	A	K – Cathode	CONNECTED
PIN6 – G1	A	G1 – Control Grid	CONNECTED
PIN7 – P	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	1860 Ω
TRANSCONDUCTANCE	0.007 S
AMPLIFICATION FACTOR	13
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	3.5 W
MAXIMUM CATHODE CURRENT	30 mA
MAXIMUM HEATER-CATHODE VOLTAGE	200 V
WARM-UP TIME	11 s
<i>Published promoted fields populated from Maximum Ratings / Characteristics / Typical Operation headings.</i>	

Series-heater UHF oscillator triode for television receivers.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	2.6 pF	Section1
Output capacitance	0.4 pF	Section1
Grid-to-plate capacitance	1.7 pF	Section1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	80 V	ClassA
Cathode resistor	18 Ω	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1860 Ω	ClassA
Transconductance	7000 μS	ClassA
Amplification factor	13	ClassA

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	80 V	Oscillator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	7000 μ S	Oscillator
Amplification Factor	13	Oscillator



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DESIGNED FOR USE AS AN OSCILLATOR IN UHF	600 mA	Oscillator DESIGNED FOR USE AS AN OSCILLATOR IN UHF. 600 MA. SERIES HEATER OPERATED
HEATER VOLTAGE	2.35 V	Maximum Ratings HEATER VOLTAGE 2.35 voLTs
MAXIMUM PLATE VOLTAGE	200 V	Maximum Ratings MAXIMUM PLATE VOLTAGE 200 VOLTS
MAXIMUM PLATE DISSIPATION	3.5 W	Maximum Ratings MAXIMUM PLATE DISSIPATION 3.5 WATTS
MAXIMUM GRID CURRENT	8 mA	Maximum Ratings MAXIMUM GRID CURRENT 8 MA.
MAXIMUM CATHODE CURRENT j	0 mA	Maximum Ratings MAXIMUM CATHODE CURRENT j0 MA.
HEATER WARM-UP TIME (APPROX.)*	11 s	Maximum Ratings HEATER WARM-UP TIME (APPROX.)* 11.0 SECONDS
HEATER CURRENT 0	0 mA	Typical Operating Conditions HEATER CURRENT 0.0 AMP.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID VOLTAGE FOR SO I	1 A	Typical Operating Conditions GRID VOLTAGE FOR SO I1A. PLATE CURRENT —15 voLTc
GRID VOLTAGE (SELF BIAS) —	4 V	Oscillator GRID VOLTAGE (SELF BIAS) —4 VOLTS
GRID RESISTOR	0 ohm	Oscillator GRID RESISTOR 10 000 OHMS

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID TO PLATE	1.7 pF	Capacitances GRID TO PLATE 1.7 1.7 uuf
HEATER TO CATHODE S	3 W	Capacitances HEATER TO CATHODE S 2.9 3.0 w~f