



ELECTRONIC TUBE REFERENCE

5T8

Voltage - Triode (with diode, heptode or hexode) electronic tube

CONSOLIDATED TECHNICAL DATA

4 SECTIONS

CONSTRUCTION

DIODE-DIODE-DIODE-
TRIODE

Triple-diode high-mu triode combining several detector or discriminator functions with voltage amplification. Three diode sections permit multiple signal and control-voltage rectification duties while the triode provides substantial gain for the recovered signal.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	4.7 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode

MAXIMUM CATHODE CURRENT 5.5 mA

Referenced ratings not printed in this source; not inferred.

SECTION2 Diode

No fixed ratings recorded.

Referenced ratings not printed in this source; not inferred.

SECTION3 Diode

No fixed ratings recorded.

Referenced ratings not printed in this source; not inferred.

SECTION4 Triode	
PLATE RESISTANCE	54000 Ω
TRANSCONDUCTANCE	0.0023 S
AMPLIFICATION FACTOR	70
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1.1 W
<i>Referenced ratings not printed in this source; not inferred.</i>	

Miniature type used as combined audio amplifier, AM detector, and FM detector in AM/FM radio receivers. Diode unit No.1 is used for AM detection, and diode units No.2 and No.3 are used for FM detection. Out- lines section, 6B; requires miniature 9-contact socket. For typical operation as resistance-coupled amplifier, refer to Resistance-Coupled Amplifier section. Types 5T8 and 19T8 are identical with type 6T8A except for heater ratings. 5T8 6T8A 19T8



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 4 · Triode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Warmup Time	11 s	—



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

Section 1 · Diode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum continuous diode current per plate	—5.5 mA	EachDiode

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Average diode current at 5 V DC	20 uA	EachDiode

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance diode 1	3.8 pF	—
Input capacitance diode 2	3.8 pF	—
Input capacitance diode 3	3.4 pF	—

Section 4 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	TriodeSection
Grid voltage	-2 V	TriodeSection
Plate current	0.8 mA	TriodeSection
Plate supply voltage	90 V	ResistanceCoupledAmplifier
Plate load resistor	220 k0hm	ResistanceCoupledAmplifier
Grid resistor	10 M0hm	ResistanceCoupledAmplifier

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification factor	70	TriodeSection
Plate resistance	54 k0hm	TriodeSection
Transconductance	2300 uS	TriodeSection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.7 pF	TriodeSection



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1968 General Electric Co

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

Section 1 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Warmup Time	11 s	—



SOURCE DATA APPENDIX

1975 RCA RC30

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

1975 RCA RC30
Section 1 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
refer to Resistance-Coupled Amplifier section. Types	19	Published value from supplied target entry
Heater Voltage (ac/dc)	18.9 volts	Published value from supplied target entry
Heater Current	0.15 ampere	Published value from supplied target entry
Heater Warm-up Time (Average)	11 seconds	Published value from supplied target entry
Plate Voltage	330 volts	Published value from supplied target entry
Grid Voltage, Positive-bias value	0 volts	Published value from supplied target entry
Plate Dissipation	1.1 watts	Published value from supplied target entry
Plate Voltage	250 volts	Published value from supplied target entry
Grid Voltage	-3 volts	Published value from supplied target entry
Amplification Factor	70	Published value from supplied target entry
Plate Resistance (Approx.)	68000 ohms	Published value from supplied target entry
Transconductance	1200	Published value from supplied target entry
Plate Current	1 mA	Published value from supplied target entry

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	1.7 PF	Published value from supplied target entry
Grid to Cathode, Internal Shield (pin	7	Published value from supplied target entry
Plate to Cathode, Internal Shield (pin	7	Published value from supplied target entry
Diode-No	1	Published value from supplied target entry
Diode-No	2	Published value from supplied target entry
Diode-No	3	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode Grid to any Diode Plate	0.034 PF	Published value from supplied target entry