

ELECTRONIC TUBE REFERENCE

5EU8

Voltage Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Triode-pentode designed for television oscillator and mixer service.

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 Triode	
PLATE RESISTANCE	6500 Ω
TRANSCONDUCTANCE	0.006 S
AMPLIFICATION FACTOR	40
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	3 W
Referenced ratings not printed in this source; not inferred.	

SECTION2 Pentode	
PLATE RESISTANCE	600000 Ω
TRANSCONDUCTANCE	0.0052 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	3.1 W
MAXIMUM SCREEN DISSIPATION	0.55 W
Referenced ratings not printed in this source; not inferred.	

5EU8 is described in the supplied Tung-Sol datasheet as a triode-pentode for television oscillator/mixer service. The redo includes a substantive section-electrical extraction from ratings and characteristic tables.



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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	4.7 V	—
Heater current	600 mA	—

1961 TUNG SOL

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	4.7 V	—
Heater current	600 mA	—



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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	4.7 V	Published rating
Heater/filament current	600 mA	Published rating
Triode transconductance	8500 μ S	TriodeSection
Triode amplification factor	40	TriodeSection

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode plate resistance	5000 ohm	TriodeSection
Pentode transconductance	6400 μ S	PentodeSection
Pentode plate resistance	80000 ohm	PentodeSection

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Combined triode oscillator and pentode mixer	TelevisionService
Electrical equivalence	6EU8 except heater characteristics	Published statement
Triode plate voltage	150 V	TriodeSection
Triode plate current	18 mA	TriodeSection
Pentode plate voltage	125 V	PentodeSection
Pentode screen voltage	125 V	PentodeSection
Pentode grid voltage	-1 V	PentodeSection
Pentode plate current	12 mA	PentodeSection
Pentode screen current	4 mA	PentodeSection


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.

1968 GENERAL ELECTRIC CO

Section 1 · Triode

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


SOURCE DATA APPENDIX

1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	150 V	Triode;ClassA
Plate current	13 mA	Triode;ClassA
Heater/filament voltage	4.7 V	DerivativeSheet
Heater/filament current	600 mA	DerivativeSheet
Cathode warm-up time	35 s	PublishedDerivativeSheet

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	6500 ohm	Triode
Transconductance	6000 uS	Triode
Amplification factor	40	Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.8 pF	Triode

1971 RCA HB3 BINDER 4 OF 7

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	150 V	Pentode;ClassA
Screen voltage	150 V	Pentode;ClassA
Plate current	10 mA	Pentode;ClassA
Screen current	3 mA	Pentode;ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	600000 ohm	Pentode

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	5200 μS	Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.01 pF	Pentode
Input capacitance	5.5 pF	Pentode
Output capacitance	3.2 pF	Pentode