

ELECTRONIC TUBE REFERENCE

4CY5

Voltage Tetrode electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TETRODE

Sharp-cutoff tetrode for VHF television-tuner RF amplification. Its high-frequency characteristics suit sensitive front-end amplification in television receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7FT	BASE PINS	7
NOMINAL HEATER	4.5 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
PLATE RESISTANCE	100000 Ω
TRANSCONDUCTANCE	0.008 S
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM SCREEN VOLTAGE	180 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	40 mA
MAXIMUM HEATER-CATHODE VOLTAGE	100 V
WARM-UP TIME	11 s
Reference/equivalence-only source: ratings/characteristics for this section are not reproduced; missing promoted values intentionally not inferred from the external 6CY5 datasheet.	

Sharp-cutoff tetrode for VHF tuner service in television receivers.

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 · Tetrode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Warmup Time	11 s	—
Plate Current	10 mA	Typical

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	125 V	Typical
Screen Voltage	80 V	Typical

SOURCE OPERATING CONDITIONS

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	—
Screen-grid voltage	80 V	—
Grid 1 voltage	-1 V	—
Plate current	10 mA	—
Screen-grid current	1.4 mA	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	125000 Ohm	—
Transconductance	8000 uS	—
Control-grid cutoff voltage	-6 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.03 pF	Shielded
Input capacitance	4.4 pF	Shielded
Output capacitance	2.8 pF	Shielded



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Westinghouse Data Book

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

1965 WESTINGHOUSE DATA BOOK

Section 1 · Tetrode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	4.5 V	—
Heater Current	300 mA	—
Transconductance	8000 uS	RepresentativePublishedPoint
Plate Resistance	125000 ohm	RepresentativePublishedPoint
Grid-Plate Capacitance	0.03 pF	PublishedDirectInterelectrodeCapacitance

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	180 V	—
Maximum Plate Dissipation	2 W	—
Plate Voltage	125 V	—
Screen Voltage	80 V	—
Grid Voltage	-1 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	10 mA	—
Screen Current	1.4 mA	—



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

Section 1 · Tetrode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.03 pF	Section1
Input capacitance	4.5 pF	Section1
Output capacitance	3 pF	Section1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	VHFTuner
Screen voltage	80 V	VHFTuner
Control-grid voltage	-1 V	VHFTuner
Plate current	10 mA	VHFTuner
Screen current	1.5 mA	VHFTuner

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	0.1 MΩ	Section1
Transconductance	8000 μS	Section1



SOURCE DATA APPENDIX

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 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	4.5 V	—
Heater Current	300 mA	—



SOURCE DATA APPENDIX

SOURCE PDF

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 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current	280 mA–320 mA	Published nominal ± tolerance
Heater Voltage	4.5 V	At heater current 0.3 A
Warm-Up Time	11 s	Average
Plate Voltage	180 V	Inherited from explicitly referenced 6-volt parent type; heater variant
Screen Supply Voltage	180 V	Inherited from explicitly referenced 6-volt parent type; heater variant
Cathode Current	20 mA	Inherited from explicitly referenced 6-volt parent type; heater variant
Plate Dissipation	2 W	Inherited from explicitly referenced 6-volt parent type; heater variant

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance at Reduced Heater Voltage	5900 μ S	Inherited from explicitly referenced 6-volt parent type; heater variant