

ELECTRONIC TUBE REFERENCE

6FV6

Voltage Tetrode electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TETRODE

Sharp-cutoff tetrode designed specifically for VHF television-tuner RF amplification, providing front-end signal gain at television receiving frequencies.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7FQ	BASE PINS	7
NOMINAL HEATER	6.3 V / 200 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	275 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	20 mA
Sharp-cutoff tetrode; 0.5 W promoted screen input applies for screen voltages up to 90 V; higher-voltage screen input is chart-limited.	

Sharp-cutoff tetrode designed for VHF television-tuner RF amplification.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Tetrode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage. o, 6.3 V 6.3 Volts	6.3 V	Heater Voltage. o, 6.3 Volts
Heater Current. 200 mA 200 Ma	200 mA	Heater Current. 200 Ma
Plate Voltage. i i, 275 Volts	275 V	Plate Voltage. i i, 275 Volts
Grid No. 2 Supply Voltage. 180 V 180 Volts	180 V	Grid No. 2 Supply Voltage. 180 Volts
Grid No. 2 Voltage. See 6AMB Ratlng Chart	2 V	Grid No. 2 Voltage. See 6AMB Ratlng Chart
Positive Grid No. 1 Voltage. .. 0 V 0 Volts	0 V	Positive Grid No. 1 Voltage. .. 0 Volts
Piate Dissipation. 2 W 2.0 Watts	2 W	Piate Dissipation. 2.0 Watts
Cathode Current. 20 mA 20 Ma	20 mA	Cathode Current. 20 Ma
Grid No. 1 Circuit Resistance (Self Bias) 0.5 Megohms	0.5 Megohms	Grid No. 1 Circuit Resistance (Self Bias) 0.5 Megohms
Grid No. 2 Voltage 80 Volts	80 V	Grid No. 2 Voltage 80 Volts
Grid No. 1 Voltage -1 Volt	-1 V	Grid No. 1 Voltage -1 Volt
Plate Current. 10 mA 10 Ma	10 mA	Plate Current. 10 Ma
Grid No. 2 Current. 1.5 Ma	1.5 mA	Grid No. 2 Current. 1.5 Ma
Transconductance. R 8000 umhos	8000 umhos	Transconductance. R 8000 umhos

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance.	0.1 Megohm	Plate Resistance. 0.1 Megohm
. 0.1 Megohm		


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1966 Tung Sol Electronic Tubes 2 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Tetrode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #1-to-plate capacitance	0.03 pF	—
Input capacitance	4.5 pF	—
Output capacitance	3 pF	—
Cathode-to-heater capacitance	2.7 pF	—

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #1 voltage at 20 uA plate current	-6 V	—


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 · Tetrode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage nominal	6.3 V	—
Heater current	200 mA	—
Plate voltage	125 V	ClassA1
Grid No.2 voltage	80 V	ClassA1
Grid No.1 voltage	-1 V	ClassA1
Plate resistance	0.1 MΩ	ClassA1
Transconductance	8000 μS	ClassA1
Plate current	10 mA	ClassA1
Grid No.2 current	1.5 mA	ClassA1
Grid No.1 voltage for plate current 20 μA	-6 V	ClassA1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage tolerance	10 %	—
Maximum plate voltage	275 V	ClassA1
Maximum grid No.2 supply voltage	180 V	ClassA1
Maximum positive grid No.1 voltage	0 V	ClassA1
Maximum cathode current	20 mA	ClassA1
Maximum grid No.2 input	0.5 W	ClassA1;ScreenVoltage<=90V
Maximum plate dissipation	2 W	ClassA1
Peak heater-cathode voltage, either polarity	200 V	DCComponentPositive<=100V
Maximum grid No.1 circuit resistance	0.5 MΩ	ClassA1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1-to-plate capacitance	0.03 pF	Maximum
Grid No.1 input capacitance	4.5 pF	—
Plate output capacitance	3 pF	—
Cathode-to-heater capacitance	2.7 pF	—