



ELECTRONIC TUBE REFERENCE

6S7

Voltage - Pentode Remote Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Triple-grid super-control remote-cutoff pentode designed for variable-gain RF/IF Class-A amplification and broad automatic-gain-control range.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	6.3 V / 150 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.00125 S
MAXIMUM PLATE DISSIPATION	2.25 W
<i>Source-derived section; promoted values populated where applicable.</i>	

E@Rirgiogham RCA-6S7 1 TRIPLE-GRID SUPER-CONTROL AMPLIFIER (TENTATIVE DATA) HEATER VOLTAGE (A.C. or D.C.) 6.3 volts HEATER CURRENT 0.18 Ampere DIRECT INTERELECTRODE CAPACITANCES: Grid to Plate 0.005 max., uuf Input 6.5 Hpf Output 10.5 ppf MAXIMUM OVERALL LENGTH 3-1/8" MAXIMUM DIAMETER 1-5/16" CAP Skirted Miniature - Style B 8ASE Smal) wafer Octal 7-Pin Amplifier - Class A OPERATING CONDITIONS and CHARACTERISTICS: Heater Voltage 6.3 6.3 volts Plate voltage 135 250 max, volts Screen voltage 67.5 100 max, volts Grid voltage (Minimum) -3 -3 volts Suppressor connected to cathode at socket Plate current 3.1 8.5 Miltiamperes Screen Current 0.9 2.0 Milliamperes Amplification Factor (Approx.) - 1750 Plate Resistance (Approx, - 1.0 Megohm Transconductance 1250 1750 Micromhos Grid voltage for transconduct- ance 10 micromhos -25 «=38,.5

Volts With shell connected to cathode, In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cat

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1940 RCA

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

1940 RCA

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HEATER VOLTAGE (A.C. or 0.C.)	6.3 V	HEATER VOLTAGE (A.C. or 0.C.) 6.3 volts
HEATER CURRENT 0	180 mA	HEATER CURRENT 0 0.18 Ampere
Grid to Plate 0.005 max., uuf	0.005 pF	Grid to Plate 0.005 max., uuf
Heater Voltage 6.3	6.3 V	Heater Voltage 6.3 6.3 volts
Plate voltage 135 250 max, volts	250 V	Plate voltage 135 250 max, volts
Screen volitage 67.5 100 max, volts	100 V	Screen volitage 67.5 100 max, volts
Grid voltage (Minimum) -3	-3 V	Grid voltage (Minimum) -3 -3 volts
Plate current 3.1	8.5 A	Plate current 3.1 8.5 Miltliamperes
Screen Current 0.9	2 mA	Screen Current 0.9 2.0 Milliamperes
Amplification Factor (Approx.)	1750	Amplification Factor (Approx.) - 1750
ance 10 micromhos -25 «=38,	5 V	ance 10 micromhos -25 «=38,.5 Volts
E+ 6.3 VOLTS SUPPRESSOR VOLTS o	6.3 V	E+ 6.3 VOLTS SUPPRESSOR VOLTS o
SCREEN VOLTS =	100 V	SCREEN VOLTS =100
Grid to plate (gl to p) max, . . e s s s e o o	5 pF	Grid to plate (gl to p) max, . . e s s s e o o 0,005 puf
Heater voltage, . , , . « + . . s o ¢ o s s o	6.3 V	Heater voltage, . , , . « + . . s o ¢ o s s o 6.3 volts
Maximum plate voltage., ... e o o o o o o	300 V	Maximum plate voltage., ... e o o o o o o 300 volts
Maximum grid #2 voltage, . . . o o o o . o o o See J	2 V	Maximum grid #2 voltage, . . . o o o o . o o o See J5""cl"

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum grid #2 supply voltage e o ¢ o o o o	300 V	Maximum grid #2 supply voltage e o ¢ o o o o 300 volts
Maximum positive dc grid #1 voltage. e @ o o o o o ° volta	1 V	Maximum positive dc grid #1 voltage. e @ o o o o o ° volta
Maximm grid #2 dissipation, ... e s s s s - o 0,	25 W	Maximm grid #2 dissipation, ... e s s s s - o 0,25 watt
Heater voltege, . . « o o ¢ ¢ o & . . 6.3	6.3 V	Heater voltege, . . « o o ¢ ¢ o & . . 6.3 6.3 volts
Heater current ., . . 150	150 mA	Heater current ., . . 150 150 ma
Plate voltage. , « o 135	250 V	Plate voltage. , « o 135 250 volts
Grid #2 voltage, . o 675	100 V	Grid #2 voltage, . o 675 100 volts
Grid #1 voltage, o =3 =	3 V	Grid #1 voltage, o =3 =3 volts
Grid #3 voltege, nnected to pin 8 at socket	8 V	Grid #3 voltege, nnected to pin 8 at socket
Plate current, , ., ., . , o o 3.7	8.5 mA	Plate current, , ., ., . , o o 3.7 8.5 ma
Grid #1 voltage (approx.) for Gm 1 .« .« =25 «	38 V	Grid #1 voltage (approx.) for Gm 1 .« .« =25 «38 volte

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx,	1 ohm	Plate Resistance (Approx, - 1.0 Megohm
Transconductance 1250	1750 µS	Transconductance 1250 1750 Micromhos
Plate resistance (approx. e o 1.0	1 ohm	Plate resistance (approx. e o 1.0 1.0 megohm



SOURCE DATA APPENDIX

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
Heater voltage	6.3 V	—
Heater current	150 mA	—
Plate voltage	300 V	Typical operating conditions
Plate current	3.78.5 mA	Typical operating conditions

TUBE TINKER

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