

804

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Thoriated-tungsten RF power pentode for amplifier and oscillator service to approximately 15 MHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	7.5 V / 3 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.00325 S
MAXIMUM PLATE VOLTAGE	1250 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	40 W
MAXIMUM CATHODE CURRENT	100 mA
Published ratings and characteristics from source sheet.	

Thoriated-tungsten power pentode for RF amplifier and oscillator service, with full-input operation to about 15 MHz.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 RCA Transmitting Tubes

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

1938 RCA TRANSMITTING TUBES

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
as high as	15 MHz	as high as 15 megacycles. The 804 has a ceramic base.
D-C Screen Voltage (Grid No. 2)	300 V	D-C Screen Voltage (Grid No. 2). 300 max. Volts
D-C Plate Current	50 mA	D-C Plate Current..... 50 max. Milliamperes
Plate Input	60 W	Plate Input..... 60 max. Watts
Suppressor Input	5 W	Suppressor Input... 5 max. Watts
Screen Input	10 W	Screen Input... 10 max. Watts
Plate Dissipation	40 W	Plate Dissipation . 40 max. Watts
Peak R-F Grid Voltage - 30 30	27 V	Peak R-F Grid Voltage - 30 30 27 Volts
D-C Plate Current - 45 45	45 mA	D-C Plate Current - 45 45 45 Milliamperes
D-C Grid Current (Approx.)	111 mA	D-C Grid Current (Approx.)- 111 Milliampere
Driving Power (Approx.) 1- 0.35 0.3	0.25 W	Driving Power (Approx.) 1- 0.35 0.3 0.25 Watt
D-C Plate Voltage	1250 V	D-C Plate Voltage . 1250 max. Volts
D-C Screen Voltage (Grid No. 2)	300 V	D-C Screen Voltage (Grid No. 2). 300 max. Volts
D-C Grid Voltage (Grid No. 1)	-300 V	D-C Grid Voltage (Grid No. 1) . -300 max. Volts
D-C Plate Current	50 mA	D-C Plate Current . 50 max. Milliamperes
D-C Grid Current	15 mA	D-C Grid Current .-.... 15 max. Milliamperes
D-C Suppressor Voltage (Grid No. 3)	200 V	D-C Suppressor Voltage (Grid No. 3). 200 max. Volts
D-C Plate Voltage- 1000 1000	1250 V	D-C Plate Voltage- 1000 1000 1250 Volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak A-F Grid Voltage- 35 35	35 V	Peak A-F Grid Voltage- 35 35 35 Volts
D-C Screen Current - 15 11	11 mA	D-C Screen Current - 15 11 11 Milliamperes
D-C Plate Voltage - 1000 max	1000 V	D-C Plate Voltage - 1000 max. 1000 max. Volts
D-C Screen Voltage*** - 300 max	200 V	D-C Screen Voltage*** - 300 max. 200 max. Volts
D-C Grid Voltage (Grid No. 1) _ -300 max	-300 V	D-C Grid Voltage (Grid No. 1) _ -300 max. -300 max. Volts
D-C Plate Current - 80 max	80 mA	D-C Plate Current - 80 max. 80 max. Milliamperes
D-C Grid Current- 15 max	15 mA	D-C Grid Current- 15 max. 15 max. Milliamperes
Plate Input - 80 max	80 W	Plate Input - 80 max. 80 max. Watts
Screen Input- 10 max	15 W	Screen Input- 10 max. 15 max. Watts
Plate Dissipation _ 27 max	27 W	Plate Dissipation _ 27 max. 27 max. Watts
D-C Plate Voltage - 1000	1000 V	D-C Plate Voltage - 1000 1000 Volts
D-C Screen Voltage - 220	155 V	D-C Screen Voltage - 220 155 Volts
D-C Plate Current . 75	75 mA	D-C Plate Current . 75 75 Milliamperes
D-C Screen Current ... 21	28 mA	D-C Screen Current ... 21 28 Milliamperes
D-C Grid Current (Approx.) .. 6	8 mA	D-C Grid Current (Approx.) .. 6 8 Milliamperes
Grid Resistor . 15000	10000 Ω	Grid Resistor . 15000 10000 Ohms
D-C Plate Voltage .. 1250 max	1250 V	D-C Plate Voltage .. 1250 max. 1250 max. Volts
D-C Screen Voltage*** 300 max	200 V	D-C Screen Voltage*** 300 max. 200 max. Volts
D-C Grid Voltage (Grid No. 1) . -300 max	-300 V	D-C Grid Voltage (Grid No. 1) . -300 max. -300 max. Volts
D-C Plate Current. 95 max	95 mA	D-C Plate Current. 95 max. 95 max. Milliamperes
D-C Grid Current _ ... 15 max	15 mA	D-C Grid Current _ ... 15 max. 15 max. Milliamperes
Plate Input _ ... 120 max	120 W	Plate Input _ ... 120 max. 120 max. Watts
Screen Input . 15 max	15 W	Screen Input . 15 max. 15 max. Watts
Plate Dissipation ... 40 max	40 W	Plate Dissipation ... 40 max. 40 max. Watts
D-C Plate Voltage 1250 1250	1250 V	D-C Plate Voltage 1250 1250 1250 Volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
D-C Screen Voltage .. 300 300	180 V	D-C Screen Voltage .. 300 300 180 Volts
Peak R-F Grid Voltage . 145 150	160 V	Peak R-F Grid Voltage . 145 150 160 Volts
D-C Screen Current . 33 27	23 mA	D-C Screen Current . 33 27 23 Milliamperes
D-C Grid Current (Approx.) 7 7	8 mA	D-C Grid Current (Approx.) 7 7 8 Milliamperes
Grid Resistor 14300 14300	12500 Ω	Grid Resistor 14300 14300 12500 Ohms
Power Output (Approx.) .. 64 80	80 W	Power Output (Approx.) .. 64 80 80 Watts
each stated value nf grid voltage should he decreased by	5 V	each stated value nf grid voltage should he decreased by 5 volts and the circuit returns made to the



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1956 RCA Transmitting Tubes

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1956 RCA TRANSMITTING TUBES

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	3250 μS	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	1500 V	—
Maximum Screen Voltage	300 V	—
Maximum Plate Dissipation	50 W	—
Maximum Cathode Current	100 mA	—
Full-Input Operating Frequency Maximum	15 MHz	—