



ELECTRONIC TUBE REFERENCE

183

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Directly heated low-load-resistance power-amplifier triode retained as a replacement type for older Sparton receivers. Published Class A operation uses about 250 V plate supply and provides approximately 1.8 W output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	4D	BASE PINS	4
NOMINAL HEATER	5 V / 1.25 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	1750 Ω
TRANSCONDUCTANCE	0.0018 S
AMPLIFICATION FACTOR	3
MAXIMUM PLATE VOLTAGE	450 V
MAXIMUM PLATE DISSIPATION	15 W
<i>Promoted from printed maximum-rating/characteristic columns; additional published values retained in TUBE_SECTION_PARAMETER.</i>	

183 — Power Amplifier Triode

The **183** (also designated as **183/483**) is a filament-type power triode designed for Class A audio power amplification. It features a coated filament and is intended for use in the output stage of AC-operated radio receivers. The tube is characterized by a low amplification factor, low plate resistance, and the ability to deliver moderate power output under Class A1 operating conditions.

Mechanical Construction and Pinout

The 183 is constructed with an ST-14 glass bulb envelope and a medium 4-pin base. The physical dimensions of the tube are:

- **Maximum overall height:** 4-11/16 inches
- **Maximum height excluding pins:** 4-1/16 inches
- **Maximum bulb diameter:** 1-13/16 inches
- **Maximum base diameter:** 1-3/8 inches
- **Outline drawing reference:** 14-1

The tube utilizes a **4D** bottom-view base connection. The pin assignments are:

- **Pin 1:** Filament
- **Pin 2:** Plate
- **Pin 3:** Grid
- **Pin 4:** Filament

Filament Ratings

The 183 features a directly heated, coated filament designed for either AC or DC operation. The filament specifications are:

- **Filament Voltage:** 5.0 V
- **Filament Current:** 1.25 A

Electrical Characteristics and Operating Conditions

The 183 is rated for a maximum plate voltage of 250 V. Under typical Class A (or Class A1) amplifier service, the tube is operated with a plate voltage of 250 V and a negative grid bias of 60 V. Depending on the specific operating point, the typical characteristics vary slightly:

Parameter	Operating Point A	Operating Point B
Plate Voltage	250 V	250 V
Grid Voltage	-60 V	-60 V
Plate Current	30 mA	25 mA
Plate Resistance	1,750 Ω	1,800 Ω
Transconductance	1,700 μmhos	1,800 μmhos
Amplification Factor (μ)	3.0	3.2
Load Resistance	—	4,500 Ω

Parameter	Operating Point A	Operating Point B
Power Output	—	2.0 W

At these operating points, the low amplification factor (3.0 to 3.2) and low plate resistance (1,750 to 1,800 Ω) are typical of early power triodes designed to drive electromagnetic speakers through a suitable output transformer. Under the second set of conditions, with a load resistance of 4,500 Ω , the tube delivers a power output of 2.0 W.

Interelectrode capacitances (input, output, and grid-to-plate) are not specified in the historical documentation.

Technical Summary

The **183** (or **183/483**) is a classic filament-type power triode housed in an ST-14 glass envelope with a medium 4-pin base. Operating with a 5.0 V, 1.25 A filament supply, it is designed for Class A power amplifier service, particularly in the output stages of AC-operated receivers. With a maximum plate voltage rating of 250 V, it typically operates at this limit with a -60 V grid bias, providing an amplification factor of approximately 3.0 to 3.2, a plate resistance of 1,750 to 1,800 Ω , and a power output of 2.0 W into a 4,500 Ω load.

SOURCE OPERATING CONDITIONS

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	1750 ohm	—
Transconductance	1700 μ S	—
Amplification Factor	3	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	—
Grid Voltage	-60 V	—
Plate Current	30 mA	—
Load Impedance	5000 ohm	—
Power Output	1.8 W	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
Grid Voltage	-60 V	ClassA
Plate Current	30 mA	ClassA



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.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Service	Power amplifier	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

Catalog Tube types Full books Blog Feedback & corrections

© 2026 Tube Tinker