

ELECTRONIC TUBE REFERENCE

TBL78000

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Forced-air-cooled high-power Philips transmitting triode for industrial RF generators and transmitters. Rated for approximately 6 kW plate dissipation and 7.2 kV plate voltage for substantial radio-frequency power service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	12.6 V / 33 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.015 S
AMPLIFICATION FACTOR	32
MAXIMUM PLATE VOLTAGE	7200 V
MAXIMUM PLATE DISSIPATION	6000 W
MAXIMUM CATHODE CURRENT	2.2 A
Published filament data, capacitances, typical characteristics, limiting values and RF operating conditions reviewed.	

TBL78000 is a Philips forced-air-cooled high-power transmitting triode for industrial RF generators and transmitters. Its datasheet specifies direct-filament operation, RF power ratings, cooling requirements, capacitances and representative operating conditions.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V4

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V4

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	12.6 V	DirectlyHeated
Filament current	33 A	DirectlyHeated
Amplification factor	32	Published
Transconductance	15000 μ S	Published

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	7200 V	Published limit
Maximum plate dissipation	6000 W	Published limit
Maximum plate/cathode current	2.2 A	Published limit
Maximum operating frequency	50 MHz	RFService
Plate voltage	6500 V	30 MHz
Plate current	2 A	30 MHz
Plate input power	13 kW	30 MHz
Plate dissipation	3.5 kW	30 MHz
Power output	9.5 kW	30 MHz

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-to-cathode capacitance	0.3 pF	Published
Grid capacitance	16 pF	Published
Grid-to-plate capacitance	11 pF	Published

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage	6000 V	—
Anode current	1 A	—
Transconductance	15000 μ S	—
Amplification factor	32	—
Anode capacitance	0.3 pF	—
Grid capacitance	16 pF	—
Anode-grid capacitance	11 pF	—
Maximum anode voltage	13000 V	—

TUBE TINKER

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and their source documents.

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