



ELECTRONIC TUBE REFERENCE

TBW79000

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

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TRIODE

Transmitting power triode intended for RF amplification, oscillator, modulation, or industrial generator service. Manufacturer documentation emphasizes professional radio-frequency operation and substantial power handling.

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

SECTION 1 Triode	
TRANSCONDUCTANCE	0.012 S
AMPLIFICATION FACTOR	24
MAXIMUM PLATE VOLTAGE	8000 V
MAXIMUM PLATE DISSIPATION	6000 W
MAXIMUM CATHODE CURRENT	1.8 A
<i>Published filament data, capacitances, typical characteristics, limiting values and RF operating conditions reviewed.</i>	

TBW79000 is a Philips water-cooled industrial RF-generator transmitting triode. 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	24	Published
Transconductance	12000 μ S	Published

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	8000 V	Published limit
Maximum plate dissipation	6000 W	Published limit
Maximum plate/cathode current	1.8 A	Published limit
Maximum operating frequency	50 MHz	RFService
Plate voltage	6000 V	CharacteristicPoint
Plate current	1 A	CharacteristicPoint
Plate input power	10.8 kW	50 MHz
Plate dissipation	3.3 kW	50 MHz
Power output	6.1 kW	50 MHz

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-to-cathode capacitance	1 pF	Published
Grid capacitance	14.2 pF	Published
Grid-to-plate capacitance	7.9 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

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	12.6 V	—
Heater/filament current	32 A	—
Transconductance	12000 μ S	—
Amplification factor	24	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	8000 V	—
Maximum plate dissipation	6000 W	—
Maximum cathode current	1.8 A	—
Operating plate voltage	7200 V	IndustrialRF;50MHz
Operating plate current	1.5 A	IndustrialRF;50MHz
Output power	6100 W	IndustrialRF;50MHz
Maximum anode input power	12000 W	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate/anode capacitance	0.4 pF	—
Grid capacitance	13.5 pF	—
Plate-grid capacitance	7.4 pF	—

TUBE TINKER

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

