



ELECTRONIC TUBE REFERENCE

TBL2400

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Forced-air-cooled ceramic coaxial UHF power triode for RF amplification, oscillation, and frequency multiplication. Rated for approximately 400 W plate dissipation and 2.2 kV plate voltage for high-frequency transmitting service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	3.4 V / 19 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
TRANSCONDUCTANCE	0.01 S
AMPLIFICATION FACTOR	33
MAXIMUM PLATE VOLTAGE	2200 V
MAXIMUM PLATE DISSIPATION	400 W
MAXIMUM CATHODE CURRENT	400 mA
<i>Published filament data, capacitances, typical characteristics, limiting values and RF operating conditions reviewed.</i>	

TBL2400 is a Philips forced-air-cooled ceramic-envelope coaxial UHF transmitting triode for RF amplification, oscillation and frequency multiplication. 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	3.4 V	DirectlyHeated
Filament current	19 A	DirectlyHeated
Amplification factor	33	Published
Alternate filament voltage	3.3 V	600-750 MHz
Alternate filament voltage	3.2 V	750-900 MHz

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	2200 V	Published limit
Maximum plate dissipation	400 W	Published limit
Maximum plate/cathode current	400 mA	Published limit
Maximum operating frequency	900 MHz	RFService
Plate voltage	2000 V	UHF
Plate current	200 mA	UHF
Plate input power	800 W	470 MHz
Plate dissipation	290 W	470 MHz

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-to-cathode capacitance	0.12 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	2000 V	—
Anode current	200 mA	—
Transconductance	10000 μ S	—
Amplification factor	33	—
Anode capacitance	0.12 pF	—
Grid capacitance	11.5 pF	—
Anode-grid capacitance	6.5 pF	—
Maximum anode voltage	2200 V	—
Maximum anode dissipation	400 W	—