

Water-cooled high-power transmitting tetrode designed for HF amplification, modulation, and frequency multiplication. Liquid cooling supports substantial professional radio-frequency output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	–	BASE PINS	–
NOMINAL HEATER	6.3 V / 32.5 A	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
TRANSCONDUCTANCE	0.019 S
AMPLIFICATION FACTOR	8.5
MAXIMUM PLATE VOLTAGE	5500 V
MAXIMUM SCREEN VOLTAGE	800 V
MAXIMUM PLATE DISSIPATION	3000 W
MAXIMUM SCREEN DISSIPATION	100 W
MAXIMUM CATHODE CURRENT	1.1 A
Promoted where the locked schema directly matches published RF values; frequency/service-specific limits and operating conditions are retained as parameter rows.	

Water-cooled high-power transmitting tetrode for HF amplification, modulation, and frequency multiplication.



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 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	5500 V	RFPowerTube
Maximum screen voltage	800 V	RFPowerTube
Application	Water-cooled high-power transmitting tetrode for HF amplification, modulation, and frequency multiplication.	
Service category	RF/AF power service as specified in source	RFPowerTube
Heater/filament voltage	6.3 V	RFPowerTube
Heater/filament current	32.5 A	RFPowerTube
Operating frequency	75 MHz	RFPowerAmpli
Plate voltage	5000 V	RFPowerAmpli
Screen voltage	800 V	RFPowerAmpli
Plate current	1.1 A	RFPowerAmpli
Power output	4100 W	RFPowerAmpli
Maximum frequency	220 MHz	RFPowerAmpli

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heating method	Direct	RFPowerTube
Device class	Tetrode	RFPowerTube

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	19000 μ S	RFPowerTube
Screen-to-control-grid amplification factor	8.5	RFPowerTube

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	8.4 pF	RFPowerTube
Control-grid capacitance	23.5 pF	RFPowerTube



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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	6.3 V	—
Heater/filament current	32.5 A	—
Transconductance	19000 μ S	—
Screen-grid amplification factor	8.5	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate/anode voltage	5500 V	—
Maximum screen-grid voltage	800 V	—
Maximum plate/anode dissipation	3000 W	—
Maximum screen-grid dissipation	100 W	—
Operating plate voltage	5000 V	ClassC;Telegraphy;75MHz
RF output power	4100 W	ClassC;Telegraphy;75MHz
Operating plate voltage	4000 V	ClassC;Telegraphy;220MHz
RF output power	2900 W	ClassC;Telegraphy;220MHz
Maximum anode input power	5500 W	30MHz
Maximum grid-1 dissipation	30 W	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate/anode capacitance	8.4 pF	—
Control-grid capacitance	23.5 pF	—
Plate-grid capacitance	0.35 pF	—