

QBL4800

Power - Tetrode (NOT beam) (over 1000V 100W) electronic tube

Transmitting power tetrode designed for RF amplification, linear/SSB service, oscillation, modulation, broadcasting, or frequency multiplication.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	5 V / 13.5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
TRANSCONDUCTANCE	0.0052 S
AMPLIFICATION FACTOR	6.2
MAXIMUM PLATE VOLTAGE	4000 V
MAXIMUM SCREEN VOLTAGE	500 V
MAXIMUM PLATE DISSIPATION	500 W
MAXIMUM SCREEN DISSIPATION	30 W
MAXIMUM CATHODE CURRENT	350 mA
Promoted where the locked schema directly matches published RF values; frequency/service-specific limits and operating conditions are retained as parameter rows.	

High-frequency transmitting tetrode for amplifier, modulator, and frequency-multiplier service.



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	4000 V	RFPowerTube
Maximum screen voltage	500 V	RFPowerTube
Application	High-frequency transmitting tetrode for amplifier, modulator, and frequency-multiplier service.	SourceDescription
Service category	RF/AF power service as specified in source	RFPowerTube
Heater/filament voltage	5 V	RFPowerTube
Heater/filament current	13.5 A	RFPowerTube
Operating frequency	110 MHz	RFPowerAmplifier
Plate voltage	4000 V	RFPowerAmplifier
Plate current	315 mA	RFPowerAmplifier
Power output	930 W	RFPowerAmplifier
Maximum frequency	120 MHz	RFPowerAmplifier

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	5200 μS	RFPowerTube
Screen-to-control-grid amplification factor	6.2	RFPowerTube

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	4.5 pF	RFPowerTube
Control-grid capacitance	12.7 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

Section 1 · Tetrode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	5 V	—
Heater/filament current	13.5 A	—
Transconductance	5200 μ S	—
Screen-grid amplification factor	6.2	—
OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate/anode voltage	4000 V	—
Maximum screen-grid voltage	500 V	—
Maximum plate/anode dissipation	500 W	—
Maximum screen-grid dissipation	30 W	—
Operating plate voltage	4000 V	ClassC;Telegraphy;110MHz
RF output power	930 W	ClassC;Telegraphy;110MHz
Operating plate voltage	2400 V	TelevisionService;220MHz;Sync
RF output power	600 W	TelevisionService;220MHz;Sync
Maximum anode input power	1400 W	120MHz
Maximum grid-1 current	30 mA	—
CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate/anode capacitance	5.6 pF	—
Control-grid capacitance	12.8 pF	—
Plate-grid capacitance	0.05 pF	—