



ELECTRONIC TUBE REFERENCE

PC0515

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Directly heated transmitting pentode designed for RF power-amplifier service. Philips industrial documentation identifies it as a professional radio-frequency output tube.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	4 V / 1.1 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
TRANSCONDUCTANCE	0.00125 S
AMPLIFICATION FACTOR	3.5
MAXIMUM PLATE VOLTAGE	500 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	15 W
MAXIMUM SCREEN DISSIPATION	5 W
MAXIMUM CATHODE CURRENT	85 mA
<i>Promoted where the locked schema directly matches published RF values; frequency/service-specific limits and operating conditions are retained as parameter rows.</i>	

Directly heated transmitting pentode for RF power-amplifier 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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	500 V	RFPowerTube
Maximum screen voltage	300 V	RFPowerTube
Application	Directly heated transmitting pentode for RF power-amplifier service.	SourceDescription
Service category	RF/AF power service as specified in source	RFPowerTube
Heater/filament voltage	4 V	RFPowerTube
Heater/filament current	1.1 A	RFPowerTube

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen-to-control-grid amplification factor	3.5	RFPowerTube

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	10 pF	RFPowerTube
Control-grid capacitance	11.5 pF	RFPowerTube

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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	500 V	—
Maximum screen voltage	300 V	—
Maximum plate dissipation	15 W	—
Maximum screen dissipation	5 W	—
Maximum cathode current	85 mA	—
Maximum peak cathode current	340 mA	—
Operating plate voltage	500 V	ClassC;Telegraphy
Operating screen voltage	300 V	ClassC;Telegraphy
Operating plate current	40 mA	ClassC;Telegraphy
RF output power	20 W	ClassC;Telegraphy
Efficiency	66 %	ClassC;Telegraphy

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1250 uS	—
Screen-grid amplification factor	3.5	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-cathode capacitance	10 pF	—
Grid-cathode capacitance	11.5 pF	—
Plate-grid capacitance	0.2 pF	—