ELECTRONIC TUBE REFERENCE

PL172

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

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PENTODE

Power pentode designed for RF transmitting, linear RF amplification, oscillation, modulation, or RF/LF power-amplifier service.

General characteristics

BASE DESIGNATION	—	**BASE PINS**	7
NOMINAL HEATER	6 V / 8.2 A	**PARALLEL HEATER**	— / —
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Pentode	
TRANSCONDUCTANCE	0.023 S
AMPLIFICATION FACTOR	3.4
MAXIMUM PLATE VOLTAGE	3000 V
MAXIMUM SCREEN VOLTAGE	750 V
MAXIMUM PLATE DISSIPATION	1000 W
MAXIMUM GRID DISSIPATION	5 W

Highest reliable published rating promoted; additional values and operating/application details retained as parameter rows.

The Penta PL172 is a forced-air-cooled 1000 w power pentode for low-distortion linear rf and high-power amplifier service.

SOURCE OPERATING CONDITIONS

1965 Penta Labs Power Tubes

SOURCE PDF

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1965 PENTA LABS POWER TUBES

Section 1 · Pentode

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	6 V	—
Heater/filament current	8.2 A	—
Amplification factor	3.4	—
Transconductance	23000 uS	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	3000 V	—
Maximum screen voltage	750 V	—
Maximum plate dissipation	1000 W	—
Maximum control-grid dissipation	5 W	—
Source language	English	—
Minimum cathode heating time	3 min	—
Useful linear RF output	1500 W	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	0.09 pF	—
Input capacitance	58 pF	—
Output capacitance	18 pF	—

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Primary application	Forced-air-cooled 1000 W power pentode for low-distortion linear RF and high-power amplifier service.	—

CONSTRUCTION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cooling	Forced air	—
Electrode structure	Pentode	—

TUBE TINKER

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

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