

PL175A

Power - Beam (NOT sweep) (over 1000V 100W) electronic tube

400 W beam pentode using a vane-type suppressor grid for low-distortion linear RF and audio amplification, suitable for transmitting, linear-amplifier, and modulator service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	5
NOMINAL HEATER	5 V / 14.5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Beam Power	
TRANSCONDUCTANCE	0.004 S
AMPLIFICATION FACTOR	4.5
MAXIMUM PLATE VOLTAGE	4000 V
MAXIMUM SCREEN VOLTAGE	750 V
MAXIMUM PLATE DISSIPATION	400 W
MAXIMUM GRID DISSIPATION	10 W
Highest reliable published rating promoted; additional values and operating/application details retained as parameter rows.	

The Penta PL175A is a 400 w beam pentode using a vane-type suppressor grid for linear rf and audio amplification.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Penta Labs Power Tubes

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

1965 PENTA LABS POWER TUBES

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	5 V	—
Heater/filament current	14.5 A	—
Amplification factor	4.5	—
Transconductance	4000 μ S	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	4000 V	—
Maximum screen voltage	750 V	—
Maximum plate dissipation	400 W	—
Maximum control-grid dissipation	10 W	—
Source language	English	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	0.06 pF	—
Input capacitance	15.1 pF	—
Output capacitance	9.8 pF	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Primary application	400 W beam pentode using a vane-type suppressor grid for linear RF and audio amplification.	—
Replacement family	4-400A	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cooling	Radiation/convection or source-specific	—
Electrode structure	Pentode	—

TUBE TINKER

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

