



ELECTRONIC TUBE REFERENCE

PL8165

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TETRODE

Quick-heating 65-watt power tetrode designed for RF and audio amplification and modulator service, suitable for rapid-start transmitting equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	5
NOMINAL HEATER	6 V / 3.5 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Tetrode	
TRANSCONDUCTANCE	0.004 S
AMPLIFICATION FACTOR	5
MAXIMUM PLATE VOLTAGE	3000 V
MAXIMUM SCREEN VOLTAGE	600 V
MAXIMUM PLATE DISSIPATION	65 W
MAXIMUM GRID DISSIPATION	5 W
Highest reliable published rating promoted; additional values and operating/application details retained as parameter rows.	

The Penta PL8165 is a quick-heating 65 w power tetrode for rf/audio amplifier and modulator service.

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 · Tetrode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	6 V	—
Heater/filament current	3.5 A	—
Amplification factor	5	—
Transconductance	4000 uS	—
Quick-heating filament	Yes	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	3000 V	—
Maximum screen voltage	600 V	—
Maximum plate dissipation	65 W	—
Maximum control-grid dissipation	5 W	—
Source language	English	—
Maximum frequency at full input	150 MHz	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-plate capacitance	0.08 pF	—
Input capacitance	7.5 pF	—
Output capacitance	2.2 pF	—

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Primary application	Quick-heating 65 W power tetrode for RF/audio amplifier and modulator service.	—

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