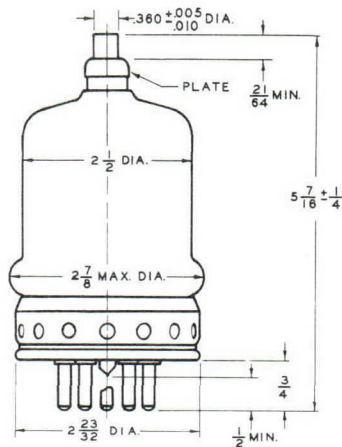


PL-4D21A

Power Tetrode



The PL-4D21A is a 175-watt dissipation radiation-cooled power tetrode unilaterally interchangeable with the 4D21/4-125A. The PL-4D21A may be substituted for the 4D21/4-125A in all applications without circuit changes. Because of the increased plate radiating area made possible by the unique Penta ribbed design, direct substitution of the PL-4D21A will result in cooler tube operation. Where circuits allow increased input, and where a small amount of air cooling can be supplied, substitution of the PL-4D21A in equipment designed for the 4D21/4-125A will allow a substantial increase in useful power output.

ELECTRICAL CHARACTERISTICS

Filament -- Thoriated Tungsten

Voltage	5.0 volts
Current	6.5 amperes

Grid-Screen mu Factor	5.9
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Transconductance (2500 v. Eb, 400 v. Ec ₂ , 70 ma. Ib)	3050 μ mhos
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Interelectrode Capacitances

Grid-Plate	0.05 μ mf
Input	10.8 μ mf
Output	3.3 μ mf

MECHANICAL CHARACTERISTICS

Base	5-pin, metal shell
Basing	EIA type 5 BK
Mounting Position	Vertical, base up or down
Maximum Overall Dimensions	
Length	5.69 inches
Diameter	2.82 inches
Net Weight	6.5 ounces

MAXIMUM RATINGS (Continuous Commercial Service)

	Class C FM or CW	Class C Plate Mod ²	Class AB ₁ Audio	Class AB ₂ Audio	
D-C Plate Voltage	3000	2500	3000	3000	volts max.
D-C Screen Voltage	400	400	600	400	volts max.
D-C Grid Voltage	-500	-500	-500	-500	volts max.
D-C Plate Current	225	200	225	225	ma. max.
Plate Dissipation ¹	175	115	175	175	watts max.
Screen Dissipation	20	20	20	20	watts max.
Grid Dissipation	5	5	5	5	watts max.

¹ Base and envelope cooling by normal convection is adequate for plate dissipation up to 125 watts. When plate dissipation exceeds 125 watts, forced air cooling of both base and envelope are required. When cooling is required, 5 c. f. m. of cooling air should be passed through the base, and small fan delivering 50-100 c. f. m. of free air should be directed at the upper portion of the tube envelope. Envelope cooling is adequate when plate seal and envelope temperatures do not exceed 200° C.

² Carrier conditions.

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PENTA LABORATORIES, INC.

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