



ELECTRONIC TUBE REFERENCE

312A

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Power pentode designed primarily for Class-C radio-frequency transmitting, amplifier, oscillator, or modulated RF service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	5 V / 250 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	4700 Ω
TRANSCONDUCTANCE	0.0018 S
AMPLIFICATION FACTOR	8.5
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM PLATE DISSIPATION	50 W
Core published characteristics promoted conservatively from the approved manual sheet.	

Air-cooled transmitting pentode for Class-C RF power amplifier service.



SOURCE OPERATING CONDITIONS

193X Cunningham

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

193X CUNNINGHAM

Section 1 · Pentode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	5 V	Published nominal
Heater/filament current	250 mA	Published nominal
Transconductance	1800 μ S	Published characteristic
Amplification factor	8.5	Published characteristic
Plate resistance	4700 Ω m	Published characteristic



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1956 Western Electric Tubes

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

1956 WESTERN ELECTRIC TUBES

Section 1 · Pentode

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tube service	Transmitting tube	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical RF power output	23 W	ClassC

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

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