



ELECTRONIC TUBE REFERENCE

4307A

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Standard Valves power pentode with documented Class-A, Class-B, and Class-C operating modes extending to approximately 70 MHz. Suitable for both amplifier and radio-frequency power applications.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	5
NOMINAL HEATER	5.5 V / —	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
MAXIMUM PLATE VOLTAGE	500 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	15 W
MAXIMUM SCREEN DISSIPATION	6 W
Ratings and characteristics extracted from 4307A.pdf.	

Pentodes.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1937 Standard Valves

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

1937 STANDARD VALVES

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-anode capacitance	0.55 pF	—
Input capacitance	15 pF	—
Output capacitance	12 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum direct anode current	60 mA	ClassA/ClassC
Maximum direct screen-grid current	25 mA	—
Maximum direct control-grid current	7 mA	ClassC/ClassB
Maximum frequency for 500 V rating	40 MHz	—
High-frequency anode-voltage rating	300 V	70MHz

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1946 Standard Telephone and Cables

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

1946 STANDARD TELEPHONE AND CABLES

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	5.5 volts	—
Nominal filament current	0 amps	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum direct anode voltage 500 500	500 volts	—
Maximum direct screen-grid voltage 300 250	250 volts	—
Maximum direct anode current 60 60	45 mA	—
Maximum direct screen-grid current 25 25	25 mA	—
Maximum direct control-grid current - 7	7 mA	—
Maximum anode dissipation 15 15	15 watts	—
Maximum screen-grid dissipation 6 6	6 watts	—
voltage on positive swing of input – +30	30 volts	—
Direct anode voltage	500 volts	—
Direct screen-grid voltage (approx.)	200 volts	—
Screen-grid circuit resistance	14000 ohms	—
Total control-grid bias (approx.)	-35 volts	—
Control-grid circuit resistance	10000 ohms	—
Fixed control-grid bias	-20 volts	—
Suppressor-grid bias	-50 volts	—
Effective load resistance	4000 ohms	—
Carrier power output	6 watts	—
Power output on A-F peaks	24 watts	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Direct anode voltage 500	500 volts	—
Direct screen-grid voltage (approx) 250	250 volts	—
Screen-grid circuit resistance 20,000	20000 ohms	—
Total control-grid bias (approx) -35	-35 volts	—
Control-grid circuit resistance 10,000	10000 ohms	—
Fixed control-grid bias ~20	-20 volts	—
Suppressor-grid bias 0	0 volts	—
Direct anode-current 45	60 mA	—
Direct screen-grid current 12	13 mA	—
Direct control-grid current -3	1.4 mA	—
Effective load resistance 6,500	5000 ohms	—
Carrier power output 15	20 watts	—
Maximum direct anode voltage 500	300 volts	—
For class C telegraphy (intermittent) 60	45 mA	—
For all other classes of service 45	45 mA	—
g 40	4 v	—