



ELECTRONIC TUBE REFERENCE

5J180E

Power - Pentode (NOT beam) (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
PENTODE

Power pentode designed for radio-frequency transmitting, Class-C power amplification, oscillation, or frequency-multiplier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	10 V / 28 A	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.005 S
MAXIMUM PLATE VOLTAGE	6000 V
MAXIMUM SCREEN VOLTAGE	1500 V
MAXIMUM PLATE DISSIPATION	3500 W
<i>Air-blast-cooled RF power pentode.</i>	

SOURCE OPERATING CONDITIONS

1947 Standard Valves

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

1947 STANDARD VALVES

Section 1 · Pentode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak emission	12 A	—

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-anode capacitance	0.6 pF	—
Input capacitance	32 pF	—
Output capacitance	21 pF	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum direct anode current	1.5 A	—
Maximum direct screen current	250 mA	—
Maximum frequency	25 MHz	—
Power output	1.4 kW	ClassB; 100% modulation
Power output	3.8 kW	ClassC; modulated
Power output	5 kW	ClassC; oscillator or unmodulated

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker