



ELECTRONIC TUBE REFERENCE

311B

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL
DATA

1 SECTION
CONSTRUCTION
PENTODE

Power pentode designed for both audio/output amplification and radio-frequency power-amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	9 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
TRANSCONDUCTANCE	0.0028 S
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	9 W
MAXIMUM SCREEN DISSIPATION	1.8 W
MAXIMUM CATHODE CURRENT	60 mA
<i>Promoted fields audited from printed ratings/characteristics; remaining published values preserved as parameters.</i>	

Suppressor-grid power pentode for audio, carrier, and RF amplifier service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

2026 Western Electric 300s

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

2026 WESTERN ELECTRIC 300S

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2800 micromhos	Transconductance . . 2800 2900 micromhos
Power Output $E^{\wedge} =$	-15 volts	Power Output $E^{\wedge} =$ -15 volts 2.5 2.5 watts
Heater Voltage, A-C or D-C (Note 1)	9 Volt	Heater Voltage, A-C or D-C (Note 1) 9«0 10.0 volts
Output	8 puf	Output 8.^ 10.4 puf
Plate Dissipation	9 watts	Plate Dissipation. . . 9.0 watts
Screen Grid Dissipation	1.8 watts	Screen Grid Dissipation 1.8 watts
Screen Grid Voltage	135 Volt	Screen Grid Voltage ... 135 135 135 volts
Transconductance	2800 micromhos	Transconductance 2800 2900 3000 micromhos
Load Resistance	3500 ohms	Load Resistance 3500 3500 4000 ohms
To t a l Harmonic Distortion	1 per cent	To t a l Harmonic Distortion 1 0 . 0 9.0 10.5 per cent
Note.1: For optimum tube life, a heater voltage of	9 volt	Note.1: For optimum tube life, a heater voltage of 9 volts is recommended.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Signal Power Output	2 watts	Maximum Signal Power Output 2 . 0 2 . 0 2.8 watts

TUBE TINKER

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