



ELECTRONIC TUBE REFERENCE

311A

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	5
NOMINAL HEATER	10 V / 640 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.0029 S
AMPLIFICATION FACTOR	146
MAXIMUM PLATE VOLTAGE	180 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>	

Western Electric 311A is a low-power indirectly heated suppressor-grid pentode for audio, carrier or radio-frequency power amplification; the 311A and 329A differ only in heater rating.

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

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Control grid to plate	0.29 pF	—
Control grid to heater/cathode/screen grid	8 pF	—
Plate to heater/cathode/screen grid	9 pF	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum direct screen-grid current	12 mA	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical plate current	31 mA	PlateVoltage=180V;ScreenGridVoltage=135V;ControlGridVoltage=-15V

TUBE TINKER

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