



ELECTRONIC TUBE REFERENCE

101J

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Low-power filamentary triode for carrier-system modulation and amplification in professional communications equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	4.15 V / 500 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
PLATE RESISTANCE	6500 Ω
AMPLIFICATION FACTOR	6.5
MAXIMUM PLATE VOLTAGE	190 V
<i>Low-power filamentary triode; similar to 101F, pear-shaped bulb, higher interelement insulation.</i>	

The 101J is a low-power filamentary triode similar in characteristics to the 101F, with a pear-shaped bulb and higher insulation between elements, for carrier-system modulation/demodulation and low-power amplification.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

2026 Western Electric 100s

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

2026 WESTERN ELECTRIC 100S

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament voltage	4.15 V	—
Filament current	500 mA	—
Maximum plate voltage	190 V	—
Plate voltage	100 V	RecommendedOperating; Point1
Grid voltage	-4 V	RecommendedOperating; Point1
Plate current	6.3 mA	RecommendedOperating; Point1
Amplification factor	6.6	RecommendedOperating; Point1
Plate resistance	5750 ohm	RecommendedOperating; Point1
Power output	16 mW	RecommendedOperating; Point1
Plate voltage	130 V	RecommendedOperating; Point2
Grid voltage	-10 V	RecommendedOperating; Point2
Plate current	4.8 mA	RecommendedOperating; Point2
Amplification factor	6.5	RecommendedOperating; Point2
Plate resistance	6500 ohm	RecommendedOperating; Point2
Power output	80 mW	RecommendedOperating; Point2
Plate voltage	180 V	RecommendedOperating; Point3
Grid voltage	-8 V	RecommendedOperating; Point3
Plate current	7 mA	RecommendedOperating; Point3
Amplification factor	6.5	RecommendedOperating; Point3
Plate resistance	5600 ohm	RecommendedOperating; Point3
Power output	62 mW	RecommendedOperating; Point3
Plate voltage	130 V	RecommendedOperating; Point4
Grid voltage	-4 V	RecommendedOperating; Point4

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	11.9 mA	RecommendedOperating; Point4
Amplification factor	6.6	RecommendedOperating; Point4
Plate resistance	4800 ohm	RecommendedOperating; Point4
Power output	20 mW	RecommendedOperating; Point4
Plate voltage	160 V	RecommendedOperating; Point5
Grid voltage	-14 V	RecommendedOperating; Point5
Plate current	5.4 mA	RecommendedOperating; Point5
Amplification factor	6.5	RecommendedOperating; Point5
Plate resistance	6500 ohm	RecommendedOperating; Point5
Power output	170 mW	RecommendedOperating; Point5
Plate voltage	160 V	RecommendedOperating; Point6
Grid voltage	-10 V	RecommendedOperating; Point6
Plate current	10 mA	RecommendedOperating; Point6
Amplification factor	6.6	RecommendedOperating; Point6
Plate resistance	5000 ohm	RecommendedOperating; Point6
Power output	120 mW	RecommendedOperating; Point6
Plate voltage	190 V	MaximumOperating; Point7
Grid voltage	-18 V	MaximumOperating; Point7
Plate current	6.2 mA	MaximumOperating; Point7
Amplification factor	6.5	MaximumOperating; Point7
Plate resistance	6100 ohm	MaximumOperating; Point7
Power output	275 mW	MaximumOperating; Point7
Plate voltage	190 V	MaximumOperating; Point8
Grid voltage	-16 V	MaximumOperating; Point8
Plate current	8.4 mA	MaximumOperating; Point8
Amplification factor	6.5	MaximumOperating; Point8
Plate resistance	5450 ohm	MaximumOperating; Point8
Power output	270 mW	MaximumOperating; Point8
Plate voltage	190 V	MaximumOperating; Point9
Grid voltage	-14 V	MaximumOperating; Point9
Plate current	10.9 mA	MaximumOperating; Point9
Amplification factor	6.6	MaximumOperating; Point9

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	5000 ohm	MaximumOperating; Point9
Power output	250 mW	MaximumOperating; Point9

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	6.5 pF	Based tube without socket
Grid-to-filament capacitance	4.2 pF	Based tube without socket
Plate-to-filament capacitance	1.7 pF	Based tube without socket

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	6500 ohm	Representative published operating point
Amplification factor	6.5	Representative published operating point