ELECTRONIC TUBE REFERENCE

448A

Voltage - Tetrode electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TETRODE

High figure-of-merit indirectly heated tetrode developed for the Western Electric TH radio-relay system, providing high-frequency amplification in professional communications equipment.

General characteristics

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	6.3 V / 450 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

Section ratings

SECTION1 Tetrode	
PLATE RESISTANCE	33000 Ω
TRANSCONDUCTANCE	0.0315 S
MAXIMUM PLATE VOLTAGE	150 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	6 W
MAXIMUM SCREEN DISSIPATION	1.75 W
MAXIMUM CATHODE CURRENT	50 mA

Typical values at plate 135 V, screen 135 V, control grid +9.5 V and 323-ohm cathode-bias resistor.

The 448A is a high figure-of-merit indirectly heated tetrode with plate characteristics approaching those of a pentode, designed primarily for the TH Radio Relay System. It is the standard mechanical version; the 448A, 448B and 454A share the same electrical characteristics.

SOURCE OPERATING CONDITIONS

SOURCE PDF

2026 Western Electric 400s

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

2026 WESTERN ELECTRIC 400S

Section 1 · Tetrode

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-Plate Capacitance	**0.03 pF**	Without external shield
Input Capacitance	**15.4 pF**	Without external shield
Output Capacitance	**2.03 pF**	Without external shield

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	**135 V**	—
Typical Screen Grid Voltage	**135 V**	—
Typical Control Grid Voltage	**9.5 V**	—
Cathode Bias Resistor	**323 ohm**	—
Plate Current	**24.9 mA**	—
Screen Grid Current	**8.8 mA**	—
Heater-Cathode Voltage Maximum	**−−50 V**	—

Tube Tinker

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

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