



ELECTRONIC TUBE REFERENCE

453A

Voltage Regulator electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

VOLTAGEREGULATOR

Two-electrode inert-gas cold-cathode voltage-reference tube designed for stable approximately 83 V operation with low fluctuation and temperature sensitivity.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	4
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Indirect; cold cathode	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Voltage Regulator	
MAXIMUM CATHODE CURRENT	8 mA
REGULATOR VOLTAGE	83 V
MINIMUM REGULATOR CURRENT	4 mA
MAXIMUM REGULATOR CURRENT	8 mA
STARTING VOLTAGE	100 V
MAINTAINING VOLTAGE	83 V
<i>Published operating/reference range 4–6 mA; absolute maximum cathode current 8 mA.</i>	

The 453A is a two-electrode inert-gas-filled cold-cathode tube designed primarily as a voltage reference, with stable life and temperature characteristics and relative freedom from voltage jumps.

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 · Voltage Regulator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Breakdown Voltage	95–105 V	—
Anode Voltage Drop at 6 mA	81–87 V	—
Regulation 4–6 mA	—1.2 V	—
Temperature Sensitivity at 5 mA	-0.0035 V/C	—
Fluctuation	—0.005 V	—
Average Ionization Time	5 ms	—
Voltage Jump	5 mV	—