

ELECTRONIC TUBE REFERENCE

NL845

Nixie electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

NIXIE

Long-life neon-filled cold-cathode numerical readout tube displaying digits 0–9 with decimal-point capability. National Electronics specifies a 170 V maximum ionization voltage and minimum supply, with defined cathode-current limits for stable indication.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 Nixie	
MAXIMUM PLATE VOLTAGE	170 V
MAXIMUM CATHODE CURRENT	4.5 mA
Cold-cathode glow display section; peak cathode-current limit promoted.	

NL845 is a long-life neon-filled cold-cathode display/readout tube displaying numerals 0–9 with decimal-point capability. The supplied sheet specifies a 170 V maximum ionization voltage, 170 V minimum supply, and published cathode-current limits.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 Nixie National Electronics

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

1968 NIXIE NATIONAL ELECTRONICS

Section 1 · Nixie

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Ionization Voltage Maximum	170 V	Published technical information
Peak Cathode Current Maximum	4.5 mA	Published technical information
Average Cathode Current Maximum	3 mA	Published technical information
Ambient Temperature Minimum	-20 degC	Normal life range
Ambient Temperature Maximum	55 degC	Normal life range
Decimal Point Current Maximum	0.5 mA	Published technical information
Recommended Supply Voltage	170 V	Published technical information
Recommended Supply Voltage	250 V	Published technical information
Recommended Supply Voltage	300 V	Published technical information

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Supply Voltage Minimum	170 V	Published technical information
Average Cathode Current Minimum	0.3 mA	Published technical information
Prebias Voltage Minimum	60 V	Off cathodes
Prebias Voltage Maximum	120 V	Off cathodes
Dynamic Life	200000 h	Published dynamic life
Decimal Point Current Minimum	0.1 mA	Published technical information

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker